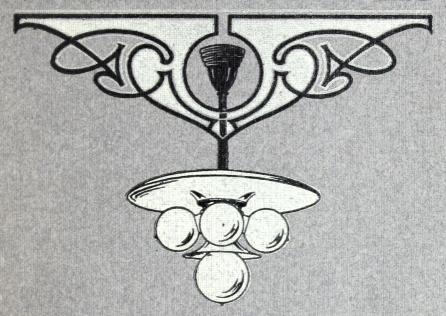
62/132

BENJAMIN

1101-30 1907 4

WIRELESS CLUSTERS & LIGHTING SPECIALTIES



CATALOGUE-B-16

BENJAMIN ELECTRIC MFG.CO.

MAIN OFFICE AND FACTORY 42 W. JACKSON BOULEVARD • CHICAGO • U·S·A•

BRANCH OFFICES
27 THAMES STREET, NEW YORK
332 CROSSLEY BLDG. SAN FRANCISCO, CAL.



NOV. 1-1905



BENJAMIN WIRELESS CLUSTERS AND LIGHTING SPECIALTIES

INTRODUCTORY

Since issuing Catalogue B-15 numerous improvements have been made in many of the clusters and other devices shown and a number of new specialties have been added and are listed berein. Creat several and a second several

DISCOUNT SHEET-Form B

Applying to Catalogue B-16

50% off list prices in broken package quantity.

50-10% off list prices in standard package quantity.

TERMS-30 days net or 2% for cash, if paid within 10 days from date of bill.

Where parties are not known to us we ship goods C. O. D., unless parties are suitably rated or give satisfactory references.

RESALE PRICES -40% off list prices.

BENJAMIN ELECTRIC MFG. Co.

insulated cluster results.

In the series clusters, the contact plates are made in sections, each section (except the two carrying the binding screws) serving two adjacent lamps, the inner and outer plates overlapping each other, thus connecting lamps in series without wiring.

8, MATUNIC WILL WELL

Wireless clusters for indoor lighting are required to be fibre lined, except the styles having a switch attached, which requires no lining.

Clusters for outdoor lighting have aluminum shells and copper threaded socket shells, but require no linings.

Other goods shown herein are of the same high standard as the clusters.

These devices are covered broadly by numerous patents.

DISCOUNT SHEET Form B'

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BENJAMIN WIRELESS CLUSTERS AND LIGHTING SPECIALTIES

INTRODUCTORY

Since issuing Catalogue B-15 numerous improvements have been made in many of the clusters and other devices shown and a number of new specialties have been added and are listed herein. Great care has been taken in compiling this catalogue to give full information relating to each device shown, giving a separate catalogue number for each part or combination of parts.

Standard package quantities have been established.

The wireless clusters consist primarily of an insulating base of porcelain, two one-piece contact plates attached thereto (each serving like terminals of all lamps in the cluster and each provided with a binding screw) and a removable casing of brass or aluminum supported by porcelain rings or bushings of special design.

In doing away with the necessity of wires in the cluster body, by combining the necessary elements of sockets upon one base, the cost of installation is considerably reduced, both for ceiling and pendant forms, and a neat, strong, durable and well

insulated cluster results.

In the series clusters, the contact plates are made in sections, each section (except the two carrying the binding screws) serving two adjacent lamps, the inner and outer plates overlapping each other, thus connecting lamps in series without wiring.

Wireless clusters for indoor lighting are required to be fibre lined, except the styles having a switch attached, which requires

no lining.

ID 40- 63888

Clusters for outdoor lighting have aluminum shells and copper threaded socket shells, but require no linings.

Other goods shown herein are of the same high standard

as the clusters.

These devices are covered broadly by numerous patents.

Instructions for Ordering

SE numbers appearing in first column, which numbers, including letter (if any), fully specify what is wanted. All clusters, sockets, receptacles, plugs, etc., are furnished in Edison base ONLY.

Clusters in which the lamps are designed to be connected in series are listed with a half number ($\frac{1}{2}$) forming a part of catalogue number.

Polished brass for interior fixtures and fittings, and polished aluminum for weatherproof clusters and sockets IS STANDARD except where otherwise indicated in catalogue, and same will be furnished unless otherwise ordered. Extra charge is made for all other finishes (see page 63).

In ordering pendant fixtures, give length from crowfoot to tip of fixture, otherwise standard lengths will be furnished.

Prices of fixtures do not include wires or lamps except where indicated in catalogue.

Goods are shipped at purchaser's risk, our responsibility ceasing when goods have been received in good order by transportation company.

This cancels all previous quotations.

Prices are subject to change without notice.

Parties unknown to us should remit with orders, unless satisfactory references are furnished.

Write for discounts.

See index on last page.

Benjamin Wireless Clusters

NATIONAL CODE STANDARD

Hundreds of thousands in use.



Clusters with shells removed.



Clusters showing flanges used where stem is required.



Benjamin Wireless Clusters are made for all classes of service.

NATIONAL CODE STANDARD

Style 8 Cluster

Ceiling Forms

The small diameter of the Style 8 Cluster permits the use of smaller Reflectors than is possible with any other style Cluster and is accomplished without the sacrifice of a single feature that goes to make Benjamin Clusters standard.

The saving from the use of this smallest Cluster is at once apparent and commends its use for conditions where the volume of light necessary is not great.

Fibre lined.



Style 8 Cluster

Polished Brass is standard finish and will be furnished unless otherwise ordered

Made in Edison base only.

Cat.	Put up 12 in a Lox	Cluster body only	With No. 3800 Flange attached	Std, Pkg.
82	2 Light Multiple	. \$1.00	\$1.10	24

For special finishes see page 63.

The Cluster attaches to the ceiling with ordinary wood screws and any of the Special Metal Reflectors (of corresponding style No.) fit Cluster back without shade holders.

This Cluster can be attached direct to outlet box by using No. 3223 flange. Made to fit Bossert boxes.

Where it is desired to use this Cluster in pendant form it is necessary to attach one of the following flanges. No. 3800 flange will be attached at factory if so ordered.

Style 8 Flange Backs with Screws Attached



Tapped 3/8-inch-Cat. No. 3800



Cat No 3223



Tapped 1/2-inch-Cat. No. 3850

Paper washers are used under heads of screws to protect the porcelain base.

Cat.		List Price	Std. Pkg.
3800	Flange tapped for %-inch pipe		24
3223	Flange for attaching to 3-inch outlet box	10	24
3224	Flange for attaching to 4-inch outlet box	15	24
3850	Flange tapped for ½-inch pipe	15	24

NATIONAL CODE STANDARD

Style 8 Cluster

Ceiling Form

Cluster with Reflector. No Stem.



Metal Reflectors used in ceiling form fit cluster back and are placed between same and ceiling.

Style 8 R

A812-12-inch Aluminum Reflector shown

Cat. No.	The Special Reflectors listed with following group fit cluster back and require no holders.	List Price,	Std. Pkg.
82A	2 Light Multiple with A812 12-inch Aluminum Reflector	. \$2.20	24
82M	2 Light Multiple with M812 12-inch Mirror Reflector	2.10	24
82T	2 Light Multiple with T812 12-inch Tin Reflector	1.40	24

For Reflectors see page 62.

Cluster with individual shades for each lamp opening



Style 8 S

G2255-Opal Shades shown.

Cluster attaches directly against ceiling without stem.

Cat. No.	Appropriate Shade Holders are included	List Price, complete	Std. Pkg.
82G	2 Light Multiple with G2255 21x5 Opal Shades	\$1.60	24
82N	2 Light Multiple with N2256 21x6 X-Ray Shades	3.20	24
82V	2 Light Multiple with V1505 1½x5 Pagoda Shades	2.70	24
82D	2 Light Multiple with D1506 1½x5 Diffusing Shades	0.00	24

For Shade Holders see page 59. For Shades see page 61.

Fixture Stems (not exceeding 36 inches in length) will be made of %-inch brass tubing; longer lengths, 3%-inch iron pipe and 34-inch brass casing.

Low canopy and crowfoot are furnished unless otherwise ordered.



Standard length stem, 8 inches. Standard finish, polished brass. Both standard finish and standard length stem will be furnished unless

otherwise ordered.

For deep canopy and insulating joint add \$0.70 to the following list prices.

Cat.	Style 08 R T812 12-inch Tin Reflector shown	List Price, complete	Std. Pkg.
082	2 Light Multiple without Reflector or Holder	\$1.70	fix- cout but but ems ski- ck-
082P	2 Light Multiple with P32512 12-inch Porcelain Reflector	2 40	vith vith ors, st
T	he special Reflectors in the following group are supported between base and ha		or vor vith
082A	2 Light Multiple with A812 12-inch Aluminum Reflector	2.90	ted ith reflication
082M 082T	2 Light Multiple with M812 12-inch Mirror Reflector 2 Light Multiple with T812 12-inch Tin Reflector	2.10	w, w esor lete can
	For Reflectors see page 62		24 a. rres nade nade nud nute ge
ADI	DITIONAL LENGTH STEM. Up to 36 inch (%-inch brass tubing) 30c foot list. (%-inch iron pipe and casing) 45c foot list.	Longer	" PERGET
Stems	78-men non pipe and cashing to the		

Fixture Stems (not exceeding 36 inches in length) will be made of %-inch brass tubing; longer lengths, 3/8-inch iron pipe and 3/4-inch brass casing.



Standard length stem, 8 inches. Standard finish, polished brass. Both standard finish and standard length stem will be furnished unless otherwise ordered.

Cat.	Style 08 S V1505—Pagoda Shades shown	List Price,	Std. Pkg.
082	2 Light Multiple without Shades or Holders	\$1.70	24 assorted fix- tures, with or
082G	Appropriate Shade Holders are included in the following: 2 Light Multiple with G2255 2 x5 Opal Shades	2 30	without shades or reflectors. b u t
082N	2 Light Multiple with N2256 2‡x6 X-Ray Shades	. 3.90	complete with
082V	2 Light Multiple with V1505 1½x5 Pagoda Shades 2 Light Multiple with D1506 1½x5 Diffusing Shades		stems and canopies, constitute a
U82D	For Shades see page 61.	. 5.50	Standard Pack- age.

ADDITIONAL LENGTH STEM. Up to 36-inch (%-inch brass tubing) 30c foot list. Longer Stems (%-inch iron pipe and casing) 45c foot list.

An Up-To-Date Building in Which Are Installed 2000 Benjamin Wireless Clusters



The Tallest Building in New York City

Among other prominent New York buildings in which Benjamin Clusters are installed are the following: Mercantile Building, Barclay Building, Times Building, Tabor Building,

Trinity Building and Hotel Breslin

NATIONAL CODE STANDARD

Style 2 Cluster

Ceiling Forms

The Style 2 Cluster, measuring three inches in diameter, was designed to meet the demand for a cluster slightly lower in price than the Style 1 and possessing all of its advantages.

By combining all the features of the large Cluster on a smaller base, a much neater and more compact appearance is obtained, making the use of Style 2 Clusters desirable up to its maximum of four lights.

Fibre lined.

Bushing at lowest point has a knockout center to accommodate lamp cord for drop light or pendant switch.



Polished Brass is standard finish and will be furnished unless otherwise ordered.

Made in Edison base only.

Style 2 Cluster 3-inch diameter

Cat.	Put up 12 in a box	Cluster body only	With No. 3200 Flange attached	Std. Pkg.
22	2 Light Multiple	\$1 25	\$1.35	24
23	3 Light Multiple	1.50	1.60	24
24	4 Light Multiple	1.75	1.85	24
	For special finishes s	ee page 63.		

The Cluster attaches to ceiling with ordinary wood screws and any of the Special Metal Reflectors (of corresponding style No.) fit Cluster back without shade holders.

This Cluster can be attached direct to outlet box by using No. 3223 Flange, made to fit Bossert boxes.

Where it is desired to use this Cluster in pendant form it is necessary to attach one of the following Flanges. No. 3200 Flange will be attached at factory if so ordered.

Style 2 Flange Backs with Screws Attached



Tapped 3/8-inch-Cat. No. 3200



Cat. No. 3223



Tapped 1/2-inch-Cat. No. 3250

Paper washers are used under heads of screws to protect the porcelain base.

Cat. No.		List Price	Std. Pkg.
3200	Flange tapped for 8-inch iron pipe	\$0.10	24
3223	Flange for attaching to 3-inch outlet box	.10	. 24
3224	Flange for attaching to 4-inch outlet box	.15	24
3250	Flange tapped for 1-inch iron pipe	.15	24

NATIONAL CODE STANDARD

Style 2 Cluster

Ceiling Forms-continued

Cluster with Reflector. No Stem.



Metal Reflectors used with ceiling form (Style 2) fit Cluster back and are placed between same and ceiling.

Style 2R

A214-14-inch Aluminum Reflector shown

Cat. No.	The Special Reflectors listed with following group fit Cluster back and require no holders.	Price, complete.	Std. Pkg.
22A	2 Light Multiple with A214 14-inch Aluminum Reflector	\$2.65	24
23A	3 Light Multiple with A214 14-inch Aluminum Reflector	2.90	24
24A	4 Light Multiple with A214 14-inch Aluminum Reflector	3.15	24
22M	2 Light Multiple with M214 14-inch Mirror Reflector	2.60	24
23M	3 Light Multiple with M214 14-inch Mirror Reflector	2.85	24
24M	4 Light Multiple with M214 14-inch Mirror Reflector	3.10	24
22T	2 Light Multiple with T214 14-inch Tin Reflector		24
23T	3 Light Multiple with T214 14-inch Tin Reflector		24
24T	4 Light Multiple with T214 14-inch Tin Reflector		24
22H 23H 24H	2 Light Multiple with H21414-inch Enameled Reflector. 3 Light Multiple with H21414-inch Fnameled Reflector. 4 Light Multiple with H21414-inch Enameled Reflector.	3.50	24 24 24

Cluster with No. 200 Sub-base and Reflector.



The rubber rings on the sub-base form a bearing surface for the Reflector and prevent its contact with metal at any point, thereby lessening breakage.

Style 200 R

P32514-14-inch Opal Reflector shown

2 Light Multiple with No. 200 Sub-base, no Reflector 3 Light Multiple with No. 200 Sub-base, no Reflector	\$1.95	24 24
ATTIL ME LET LOS COLL DO COLL	0 1=	24
		24 24
		24
3 Lt. Mult. with No. 200 Sub-base and X32514 14-in. X-Ray Reflect	or 4.20	24 24 24
	3 Light Multiple with No. 200 Sub-base, no Reflector 4 Light Multiple with No. 200 Sub-base, no Reflector 2 Lt. Mult. with No. 200 Sub-base and P32514 14-in. Opal Reflector 3 Lt. Mult. with No. 200 Sub-base and P32514 14-in. Opal Reflector 4 Lt. Mult. with No. 200 Sub-base and P32514 14-in. Opal Reflector 2 Lt. Mult. with No. 200 Sub-base and X32514 14-in. X-Ray Reflect 3 Lt. Mult. with No. 200 Sub-base and X32514 14-in. X-Ray Reflect	3 Light Multiple with No. 200 Sub-base, no Reflector 2 20 4 Light Multiple with No. 200 Sub-base, no Reflector 2 45 2 Lt. Mult. with No. 200 Sub-base and P32514 14-in. Opal Reflector 2 55 3 Lt. Mult. with No. 200 Sub-base and P32514 14-in. Opal Reflector 2 80

For Sub-base see page 57. For Reflectors see page 62.

Style 2 Cluster

Cluster with individual shades for each lamp opening.



Ceiling Forms

Continued

Cluster attaches directly against ceiling without stem.

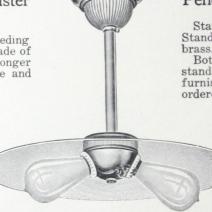
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+ TT 10	.)	DIENE Parada	Shadag ghown
DIVIE	417	1111000 — 1 ag oua	Dilauco Silowii

	List Price.	Std.
Cat.	Appropriate shade holders are included complete. P	kg.
22G	2 Light Multiple with G2255 21x5 Opal Shades \$1.85	24
22N	2 Light Multiple with N2256 24x6 X-Ray Shades	24
22V	2 Light Multiple with V1505 1+x5 Pagoda Shades 2 95	24
22D	2 Light Multiple with D1506 1 x5 Diffusing Shades	24
23G	3 Light Multiple with G2255 24x5 Opal Shades 2.40	24
	3 Light Multiple with N2256 24x6 X-Ray Shades 4 80	24
23N	2 Light Multiple with V1505 11v5 Pagoda Shades 405	24
23V	o the multiple with visos is a code phases	
23D	3 Light Multiple with D1506 1½x5 Diffusing Shades 4.20	24
24G	4 Light Multiple with G2255 21x5 Opal Shades 2 95	24
	4 Light Multiple with N2256 24x6 X-Ray Shades 6 15	24
24N	4 Light Multiple with N2230 24X0 A-Nay Shades	24
24V	4 Light Multiple with V1505 11x5 Pagoda Shades 5 15	
24D	4 Light Multiple with D1506 1 x5 Diffusing Shades 5.35	24
	For Shade Holders see page 59. For Shades see page 61.	

Style 2 Cluster

Fixture stems (not exceeding 36 inch length) will be made of inch brass tubing - longer lengths & inch iron pipe and 4 inch brass casing.

Low canopy and crowfoot are furnished unless otherwise ordered.



Pendant Forms

Standard length stem 8 inch. Standard finish - Polished brass.

Both standard finish and standard length stem will be furnished unless otherwise ordered.

> For deep canopy and insulating joint add \$0.70 to the following list prices.

Cat.			T214-14-inch			List Price, complete.	Std. Pkg.
022 023	2 Light 1	Multiple with	out Reflectors o	r Holders .		2.20	tures, effec- is and ndard
024	4 Light	Multiple with	out Reflectors o	r Holders.		2.45	refl refl ms a
			de holders are includ				Steer
022P	2 Light	Multiple with	P32514 14-inch	Porcelain	Reflector.	2.85	a a sh
022X	2 Light	Multiple with	X32514 14-inch	X-Ray Re	eflector .	4.25	ste ad wit te
022E	2 Light 1	Multiple with	E32514 14-inch	Diffusing	Reflector	. 4.65	sh sh te te
023P	3 Light	Multiple with	P32514 14-inch	Porcelain	Reflector	. 3.10	ut ple ple
023X	3 Light	Multiple with	X32514 14-inch	X-Ray Re	eflector	. 4.50	thed thoromp con
023E	3 Light	Multiple with	E32514 14-inch	Diffusing	Reflector	. 4.90	wii t cc s,
			P32514 14-inch				as or bu
024X	4 Light	Multiple with	X32514 14-inch	X-Ray Ro	eflector	. 4.75	th th sek
024E	4 Light	Multiple with	E32514 14-inch	Diffusing	Reflector	. 5.15	with tors, cano Pacl
			enoths up to 36-inch				inches long

(3%-inch iron pipe and casing), 45c ft. list. For Reflectors see page 62

NATIONAL CODE STANDARD

Style 2 Cluster

Pendant Forms-continued

Cat. No.	The Special Reflectors in following group fit Cluster back and require no holders. Price L comple	
022A 022M 022T	2 Light Multiple with A214 14-inch Aluminum Reflector . \$3.3. 2 Light Multiple with M214 14-inch Mirror Reflector) 144 % ø
022H 023A 023M 023T 023H	2 Light Multiple with H214 14-inch Enameled Steel Reflector 3 98 3 Light Multiple with A214 14-inch Aluminum Reflector 3.60 3 Light Multiple with M214 14-inch Mirror Reflector 3.50 3 Light Multiple with T214 14-inch Tin Reflector 2.70 3 Light Multiple with H214 14-inch Enameled Steel Reflector 4.20	ed Clustrith or wrreflectors with sipples, cons
024A 024M 024T 024H	4 Light Multiple with A214 14-inch Aluminum Reflector	24 ass tures, shade; compl and ca
	For Reflectors see page 62.	

Fixture stems not exceeding 36-inch length will be made of %-inch brass tubing — longer lengths of %-inch iron pipe and %-inch brass casing.

Low canopy and crowfoot are furnished unless otherwise specified.



Standard length stem 8 inch.

Standard finish Polished Brass.

Both standard finish and standard length stem will be furnish unless otherwise ordered.

For deep canopy and insulating joint add \$0.70 to the following list prices.

Style 02S

Cat.		ist Price, Std.
022 023 024	2 Light Multiple without Shades or Holders	complete Pkg. \$1.95
0220 0221 0221 0221 0230 0231	Appropriate Shade Holders are included G 2 Light Multiple with G2255 2½x5 Opal Shades N 2 Light Multiple with N2256 2½x6 X-Ray Shades V 2 Light Multiple with V1505 1½x5 Pagoda Shades D 2 Light Multiple with D1506 1½x5 Diffusing Shades G 3 Light Multiple with G2255 2½x5 Opal Shades	ster fixtures, w r reflectors, but md canopies, cons
023	V 3 Light Multiple with V1505 1\frac{1}{2}x5 Pagoda Shades	rted shades d Pace
0240 0241 0241 0241	N 4 Light Multiple with N2256 2½x6 X-Ray Shades . V 4 Light Multiple with V1505 1½x5 Pagoda Shades .	24 assorted clu without shades of plete with stems a Standard Packa

For Shades see page 61. For Shade Holders see page 59.

ADDITIONAL LENGTH STEM—Lengths up to 36-inch (%-inch brass tubing) 30c ft. list. Longer Stems (%-inch iron pipe and casing) 45c ft. list.

Benjamin Wireless Clusters

180 of Them Installed in This Building



THE HENRY SIEGEL BUILDING-BOSTON

Among other Boston Buildings containing installations of Benjamin Wireless Clusters are the following:

THE HENRY WALKER BUILDING THE MONKS BUILDING AND THE JOHN HANCOCK BUILDING

NATIONAL CODE STANDARD

Style 1 Cluster

Ceiling Form

Fibre lined.

Bushing at lowest point has a knock-out center to accommodate lamp cord for drop light or pendant switch.



Polished brass is standard finish and will be furnished unless otherwise ordered,

Made in Edison base only.

Style 1 Cluster
4-inch diameter

Cat.	Put up 6 in a box	Cluster body only.	With No. 3100 Flange attached	Std. Pkg.
12	2 Light Multiple	\$1.50	\$1.65	12
	3 Light Multiple		1.90	12
	4 Light Multiple		2.15	12
15	5 Light Multiple	2.25	2.40	24
	6 Light Multiple		2.65	24

For special finishes see page 63.

The Cluster attaches to ceiling with ordinary wood screws and any of the Special Metal Reflectors (of corresponding style No.) fit Cluster back without shade holders.

This Cluster can be attached direct to outlet box by using No. 3123 Flange made to fit Bossert boxes.

Where it is desired to use the Cluster in pendant form it is necessary to attach one of the following Flanges. No. 3100 Flange will be attached at factory if so ordered.

Style 1 Flange Backs with Screws Attached







Tapped 3/8-inch-Cat. No. 3100

Cat. No. 3124

Tapped ½-inch-Cat. No. 3150

Paper washers are used under heads of screws, also between flange and cluster base, to prevent porcelain from breaking.

Cat.		List Price	Std. Pkg.
	Flange tapped for 3/8-inch pipe	\$0.15	24
3123	Flange for attaching to 3-inch outlet box	.15	24
3124	Flange for attaching to 4-inch outlet box	.15	24
	Flange tapped for ½-inch pipe		24
3175	Flange tapped for ¾-inch pipe	. 20	24

Style 1 Cluster

Ceiling Forms-continued

Cluster with Reflector. No Stem. For Reflectors see page 62.

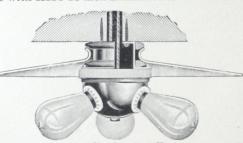


Metal Reflectors used with ceiling form (Style 1) fit Cluster back and are placed between same and ceiling.

Style 1R

A114-14 inch Mirror Reflector shown				
Cat.	The Special Reflectors listed with following group fit Cluster back List Pric			
No.				
12A	2 Light Multiple with A114 14-inch Aluminum Reflector \$2 90			
13A	3 Light Multiple with A114 14-inch Aluminum Reflector 3 15			
14A	4 Light Multiple with A114 14-inch Aluminum Reflector 3 40			
15A	5 Light Multiple with A114 14-inch Aluminum Reflector 3 65			
16A	6 Light Multiple with A114 14-inch Aluminum Reflector 3.90	24		
12M	2 Light Multiple with M114 14-inch Mirror Reflector 2 85	12		
13M	3 Light Multiple with M114 14-inch Mirror Reflector . 3 10	12		
14M	4 Light Multiple with M114 14-inch Mirror Reflector	12		
15M	5 Light Multiple with M114 14-inch Mirror Reflector 3 60	24		
16M	6 Light Multiple with M114 14-inch Mirror Reflector	24		
	2 Light Multiple with T114 14-inch Tin Reflector 2 00	12		
12T	2 Light Multiple with T114 14-inch Tin Reflector 2 25	12		
13T				
14T				
15T		24		
16T	o Light Multiple with 1111 11 men 1111 200000000000000000000000000000000			
12H	2 Light Multiple with H114 14-inch Enameled Steel Reflector 3 50			
13H	3 Light Multiple with H114 14-inch Enameled Steel Reflector . 3 75			
14H	4 Light Multiple with H114 14-inch Enameled Steel Reflector . 4 00			
15H	5 Light Multiple with H114 14-inch Enameled Steel Reflector . 4 25	24		
16H	6 Light Multiple with H114 14-inch Enameled Steel Reflector . 4.50	24		
TOTI	O TIENO TITULE			

Cluster with No. 100 Sub-base and Reflector. For Sub-base see page 57.



The rubber rings on the Sub-base form a bearing surface for the Reflector and prevent its contact with metal at any point, thereby lessen-ing breakage.

Style 100 R

	20020		
Cat.	P32514—14 inch Opal Reflector shown	List Price complete.	
10012	2 Lt. Mult. with No. 100 Sub-base, no Reflector	. \$2 20	12
10013	3 Lt. Mult. with No. 100 Sub-base, no Reflector		12
10014	4 Lt. Mult. with No. 100 Sub-base, no Reflector	. 2.70	12
10015	5 Lt. Mult. with No. 100 Sub-base, no Reflector		24
10016	6 Lt. Mult. with No. 100 Sub-base, no Reflector		24
10012P	2 Lt. Mult. with No. 100 Sub-base and P32514 14-in. Opal Reflector	2.80	12
10013P	3 Lt. Mult. with No. 100 Sub-base and P32514 14-in. Opal Reflector	3.05	12
10014P	4 Lt. Mult. with No. 100 Sub-base and P32514 14-in. Opal Reflector	3.30	12
10015P	5 Lt. Mult. with No. 100 Sub-base and P32514 14-in. Opal Reflector	3.55	24
10016P	6 Lt. Mult. with No. 100 Sub-base and P32514 14-in. Opal Reflector	3.80	24
10012X	2 Lt. Mult. with No. 100 Sub-base and X32514 14-in. X-Ray Reflected	or 4.20	12
	3 Lt. Mult. with No. 100 Sub-base and X32514 14-in. X-Ray Reflect		12
	4 Lt. Mult. with No. 100 Sub-base and X32514 14-in. X-Ray Reflect		12
	5 Lt. Mult. with No. 100 Sub-base and X32514 14-in. X-Ray Reflect		24
	6 Lt. Mult. with No. 100 Sub-base and X32514 14.in. X-Ray Reflect		24
1001011	o Do. Mario, while the too bus buse and Model than Mariony technology	0.20	24

NATIONAL CODE STANDARD

Style 1 Cluster

Ceiling Forms-continued

Cluster with Individual Shades for each Lamp Opening



Cluster attaches directly against ceiling without stem

Style 1S

N2256—X-Ray shades shown
Can be used with stem by using No. 3100 flange.

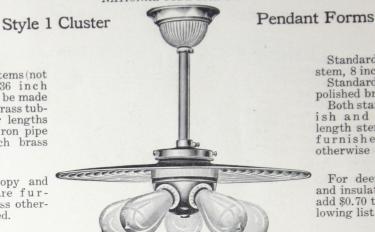
Cat. No.	Appropriate Shade Holders are included	List Price, complete	Std. Pkg.
12G	2 Light Multiple with G2255 24x5 Opal Shades	\$2.10	12
12N	2 Light Multiple with N2256 21x6 X-Ray Shades	3.70	12
12V	2 Light Multiple with V1505 1½x5 Pagoda Shades	3.20	12
12D	2 Light Multiple with D1506 11x5 Diffusing Shades	3.30	12
13G	3 Light Multiple with G2255 21x5 Opal Shades	2.65	12
13N	3 Light Multiple with N2256 24x6 X-Ray Shades	5.05	12
13V	3 Light Multiple with V1505 11x5 Pagoda Shades	4.30	12
13D	3 Light Multiple with D1506 1½x5 Diffusing Shades	4.45	12
14G	4 Light Multiple with G2255 21x5 Opal Shades	3.20	12
14N	4 Light Multiple with N2256 21x6 X-Ray Shades	6.40	12
14V	4 Light Multiple with V1505 12x5 Pagoda Shades	5.40	12
14D	4 Light Multiple with D1506 1½x5 Diffusing Shades	5.60	12
15G	5 Light Multiple with G2255 21x5 Opal Shades	3.75	24
15N	5 Light Multiple with N2256 24x6 X-Ray Shades	7.75	24
15V	5 Light Multiple with V1505 11x5 Pagoda Shades	6.50	24
15D	5 Light Multiple with D1506 14x5 Diffusing Shades	6.75	24
*16V	6 Light Multiple with V1505 1½x5 Pagoda Shades	7.60	24

*Other standard shades are of too large diameter to permit their use with Style 1 6 light cluster.

For Shade Holders see page 59. For Shades see page 61

Fixture stems (not exceeding 36 inch length) will be made of %-inch brass tubing, longer lengths of %-inch iron pipe and ¾-inch brass casing.

Low canopy and crowfoot are fur-nished unless otherwise ordered.



Standard length stem. 8 inch.

Standard finish. polished brass.

Both standard finish and standard length stem will be furnished unless otherwise ordered.

For deep canopy and insulating joint add \$0.70 to the following list prices.

Cat. No. 012 013 014 015 016	Style O1 R X32514—14 inch X-Ray Reflector Shown 2 Light Multiple without Reflector or Holder	without shades or reflectors, but complete with stems and high
	Appropriate Shade Holders are included in the following	rit
012P 012X 012E	2 Light Multiple with P32514 14-inch Porcelain Reflector 3.15 2 Light Multiple with X32514 14-inch X-Ray Reflector 4.55 2 Light Multiple with E32514 14-inch Diffusing Reflector 4.95	mplete w
013P 013X 013E	3 Light Multiple with P32514 14-inch Porcelain Reflector 3 40 3 Light Multiple with X32514 14-inch X-Ray Reflector 4 80 3 Light Multiple with E32514 14-inch Diffusing Reflector 5.20	s, but co
014P 014X 014E	4 Light Multiple with P32514 14-inch Porcelain Reflector 3 65 4 Light Multiple with X32514 14-inch X-Ray Reflector 5 05 4 Light Multiple with E32514 14-inch Diffusing Reflector 5 45	reflector
015P 015X 015E	5 Light Multiple with P32514 14-inch Porcelain Reflector 3 90 5 Light Multiple with X32514 14-inch X-Ray Reflector 5 30 5 Light Multiple with E32514 14-inch Diffusing Reflector 5.70	hades or
016P 016X 016E	6 Light Multiple with P32514 14-inch Porcelain Reflector 4.15 6 Light Multiple with X32514 14-inch X-Ray Reflector 5 55 6 Light Multiple with E42514 14-inch Diffusing Reflector 5.95	ithout s
	The Special Reflectors in the following group fit between Cluster Base and Flange	8
012A 012M 012T	2 Light Multiple with 2 Light Multiple with 2 Light Multiple with 3 Light Multiple with 4 114 14-inch Mirror Reflector	with or
013A 013M 013T	3 Light Multiple with 3 Light Multiple with 4114 14-inch Mirror Reflector 3 90 3 Light Multiple with 4114 14-inch Mirror Reflector 3 85 3 Light Multiple with 4114 14-inch Tin Reflector 3 00	ixtures, andard F
014A 014M 014T	4 Light Multiple with 4 Light Multiple with 4 Light Multiple with 4 Light Multiple with 5 T114 14-inch Tin Reflector	cluster f ute a St
015A 015M 015T	5 Light Multiple with 5 Light Multiple with 5 Light Multiple with 6 Light Multiple with 7 Light Multiple with 8 Light Multiple with 8 Light Multiple with 7 Light Multiple with 8 Light Multiple with 8 Light Multiple with 8 Light Multiple with 8 Light Multiple with 9 Light Multiple with	24 assorted cluster fixtures, with or canopies, constitute a Standard Package.
016A 016M 016T	6 Light Multiple with 6 Light Multiple with 6 Light Multiple with 6 Light Multiple with 7114 14-inch Tin Reflector	24 a
	For Shade Holders see page 59. For Reflectors see page 62.	

ADDITIONAL LENGTH STEM. Lengths up to 36-inch (%-inch brass tubing), 30c foot, list. Over 36 inches long (%-inch iron pipe and casing), 45c foot, list.

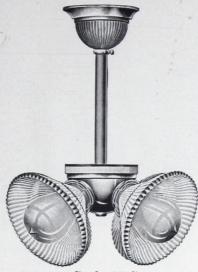
NATIONAL CODE STANDARD

Style 1 Cluster

Pendant Forms-continued

Fixture stems (not exceeding 36-inch length) will be made of §-inch brass tubing, longer lengths of §-inch iron pipe and §-inch brass casing.

Low Canopy and Crowfoot are furnished unless otherwise specified.



Style 01 S D1506 Diffusing Shades shown Standard length stem, 8-inch. Standard finish, Polished Brass. Both standard finish and standard length stem will be furnished

For Deep Canopy and Insulating Joint add 70c to the following list prices.

unless otherwise

ordered.

	Disor Dillusing Snades snown		
Cat. No.		List Price, complete	Std. Pkg.
012 013 014 015 016	2 Light Multiple without Shades or Holders. 3 Light Multiple without Shades or Holders. 4 Light Multiple without Shades or Holders. 5 Light Multiple without Shades or Holders. 6 Light Multiple without Shades or Holders.	2.50 2.75 3.00	Shades or constitute
012G 012N 012V 012D	Appropriate Shade Holders are included with the following. 2 Light Multiple with G2255 21x5 Opal Shades 2 Light Multiple with N2256 21x6 X-Ray Shades 2 Light Multiple with V1505 11x5 Pagoda Shades 2 Light Multiple with D1506 11x5 Diffusing Shades	4.45 3.95	with or without ns and Canopies,
013G 013N 013V 013D	3 Light Multiple with G2255 21x5 Opal Shades 3 Light Multiple with N2256 21x6 X-Ray Shades 3 Light Multiple with V1505 11x5 Pagoda Shades 3 Light Multiple with D1506 11x5 Diffusing Shades	5.80 5.05	ixtures, wit vith Stems
014G 014N 014V 014D	4 Light Multiple with G2255 2½x5 Opal Shades 4 Light Multiple with N2256 2½x6 X-Ray Shades 4 Light Multiple with V1505 1½x5 Pagoda Shades 4 Light Multiple with D1506 1½x5 Diffusing Shades	7.15 6.15	d Cluster F it complete v ackage.
015G 015N 015V 015D	5 Light Multiple with G2255 2\frac{1}{4}x5 Opal Shades 5 Light Multiple with N2256 2\frac{1}{4}x6 X-Ray Shades 5 Light Multiple with V1505 1\frac{1}{2}x5 Pagoda Shades 5 Light Multiple with D1506 1\frac{1}{2}x5 Diffusing Shades	8.50 7.25	24 Assorted Cluster Fixtures, wi Reflectors, but complete with Stems a Standard Package.
*016V	6 Light Multiple with V1505 1½x5 Pagoda Shades	8.35	H 8

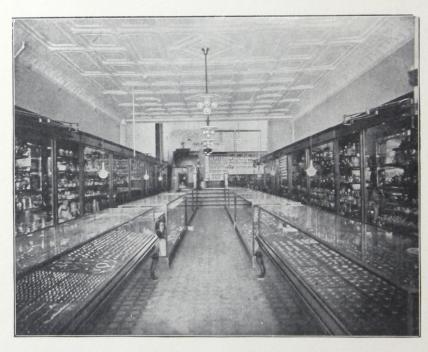
*Other Standard Shades are of too large diameter to permit their use with Style 1 6-Light Cluster.

For Shade Holders see page 59 For Shades see page 61

Installations of Benjamin Wireless Clusters



Chicago Post Office, in which a quantity of Benjamin Wireless Clusters are being installed.



A Jewelry Store in St. Joseph, Mo., lighted by Benjamin Arc Burst Cluster.

NATIONAL CODE STANDARD

Style K Clusters

Ceiling Form

The Style K Cluster (having a central lamp opening) has become a very popular form of Cluster owing to the variety of attractive forms into which it can be made and the various uses to which it can be put.

This form of Cluster can be furnished with a 3-wire connection (which you may designate by the letter Y following Cat. No.), whereby the center lamp can be controlled independent of the side lights by means of a suitable switch or switches.

Fibre lined



Polished brass is standard finish and will be furnished unless otherwise ordered.

Made in Edison base only.

Style K Cluster

Cat.	Put up 6 in a box	Cluster body only.	With No. 3100 Flange attached.	Std. Pkg.
13K	3 Light Multiple	\$1.80	\$1.95	12
14K	4 Light Multiple	 2.05	2.20	24
15K	5 Light Multiple	2.30	2.45	24
16K	6 Light Multiple	2.55	2.70	24
17K	7 Light Multiple	 2.80	2.95	24

For 3-wire (Y) connections add 25c to list price.

For special finishes see page 63.

The Cluster attaches to the ceiling with ordinary wood screws and any of the Special Metal Reflectors (of corresponding style No.) fit Cluster back without holders.

This Cluster can be attached direct to outlet box by using No. 3124 Flange made to fit Bossert boxes.

Where it is desired to use this Cluster in pendant form it is necessary to attach one of the following Flanges. No. 3100 Flange will be attached at factory if so ordered.

Style K Flange Backs with Screws Attached







Tapped \(^3\)_-inch-Cat. No. 3100

Cat. No. 3124

Tapped ½-inch-Cat. No. 3150

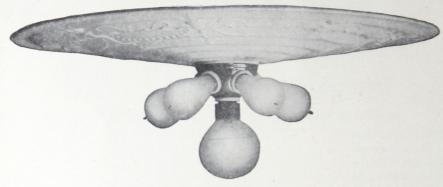
Paper washers are used under heads of screws to protect the porcelain base.

Cat. No.		List Price	Std. Pkg.
3100	Flange tapped for %-inch pipe	\$0.15	24
3123	Flange for attaching to 3-inch outlet box	. 15	24
3124	Flange for attaching to 4-inch outlet box	. 15	24
3150	Flange tapped for ½-inch pipe	.20	24
3175	Flange tapped for 34-inch pipe	.20	24

Cluster with Concentric Diffuser

This Diffuser is 26 inches in diameter, is ornamental in design and is made of steel with Austrian air dried enamel which does not turn yellow.

The form of this Diffuser is such as to distribute the light over a large area, and the center is made to receive a Style K Cluster of from 3 to 7 lights.



Style KC.

This fixture can be suspended from ceiling by using a suitable stem. Prices are for diffuser, cluster, flange, short nipple and crowfoot for ceiling connection.

Any style or make of lamps may be used, but frosted meridian type lamps produce the best effect.

Cluster complete less lamps

Cat. No.]	List Price	Std. Pkg.
13KC	3 Light Multiple, complete less lamps				\$8.60	12
14KC	4 Light Multiple, complete less lamps				8.85	12
15KC	5 Light Multiple, complete less lamps				9.10	12
16KC	6 Light Multiple, complete less lamps				9.35	12
17KC	7 Light Multiple, complete less lamps				9.60	12

These Clusters can be furnished with a Turn Down (Y connection) for which add 25c to list price.

For description of Turn Down feature see page 30.

Style K Cluster

Ceiling Form

Cluster with individual shades for each lamp opening.



D1506 Diffusing shades shown

Cluster attaches directly against ceiling without stem.

For other attaching means see page 19

Cat. No. 13KG 13KN 13KV 13KD	Appropriate Shade Holders are included. 3 Light Multiple with G2255 2‡x5 Opal Shades 3 Light Multiple with N2256 2‡x6 X-Ray Shades 3 Light Multiple with V1505 1‡x5 Pagoda Shades 3 Light Multiple with D1506 1‡x5 Diffusing Shades	List Price, complete \$2.70 5.10 4.35 4.50	out shades or des, constitute was
14KG	4 Light Multiple with G2255 21x5 Opal Shades	3.25	without canopies,
14KN	4 Light Multiple with N2256 24x6 X-Ray Shades	6.45	0
14KV	4 Light Multiple with V1505 11x5 Pagoda Shades	5.45	hara
14KD	4 Light Multiple with D1506 1 x5 Diffusing Shades	. 5.65	ss, with
15KG	5 Light Multiple with G2255 21x5 Opal Shades	3.80	res
15KN	5 Light Multiple with N2256 2+x6 X-Ray Shades	. 7.80	fixture te with
15KV	5 Light Multiple with V1505 12x5 Pagoda Shades	. 6.55	fix
15KD	5 Light Multiple with D1506 11x5 Diffusing Shades	6.80	cluster comple ckage.
16KG	6 Light Multiple with G2255 2\frac{1}{2}x5 Opal Shades	4.35	
16KN	6 Light Multiple with N2256 24x6 X-Ray Shades	9.15	but d Pa
16KV	6 Light Multiple with V1505 1 x5 Pagoda Shades	7.65	assorted tors, but ndard Pa
16KD	6 Light Multiple with D1506 11x5 Diffusing Shades	7.95	4 as
*17KV	7 Light Multiple with V1505 Pagoda Shades	8.75	24 assor reflectors, l a Standard

*Other Standard Shades are of too large diameter to permit their use with Style K 7 Light Cluster.

For Shade Holders see page 59 For Shades see page 61

Style K Cluster

Pendant Form

Fixture stems not exceeding 36-inch length will be made of \(\frac{2}{3}\)-inch brass tubing, longer lengths of \(\frac{2}{3}\)-inch brass casing.

Low canopy and crowfoot are furnished unless otherwise specified.



Style OK S

Standard length stem-

Standard finish—polished

Both standard finish and standard length stem will be furnished unless otherwise ordered.

For deep canopy and insulating joint add 70c to the following list prices.

Cat.		List Price Std. Complete Pkg.
No. 013K 014K 015K 016K 017K	3 Light Multiple without Shades or Holders 4 Light Multiple without Shades or Holders 5 Light Multiple without Shades or Holders 6 Light Multiple without Shades or Holders 7 Light Multiple without Shades or Holders	\$2.55 2.80 3.05 3.30 2.80 3.05 3.30
	Appropriate shade holders are furnished with the following	t sh stit
013KG 013KN 013KV 013KD	3 Light Multiple with N2256 21x6 X-Ray Shades 3 Light Multiple with V1505 11x5 Pagoda Shades	3.45 no unithout with or with
014KG 014KN 014KV 014KD	THE THE PARTY OF T	. 4.00 \$10 . 7.20 se
015KG 015KN 015KV 015KD	5 Light Multiple with G2255 2½x5 Opal Shades 5 Light Multiple with N2256 2½x6 X Ray Shades 5 Light Multiple with V1505 1½x5 Pagoda Shades 5 Light Multiple with D1506 1½x5 Diffusing Shades	4 55 4 55 4 4 55 4 4 55 4 4 55 4 6 6 6 6
016KG 016KN 016KV 016KD *017KV	The second of th	. 9 90 sv sv som sackage . 8 40 . 8 70

*Most Standard shades are of too large diameter to permit their use with Style K7 Light Cluster.

For Shade Holders see page 59. For Shades see page 61.

ADDITIONAL LENGTH STEM. Lengths up to 36-inch (%-inch brass tubing), 30c foot, list; over 36 inches leng (%-inch iron pipe and casing), 45c foot, list.

NATIONAL CODE STANDARD

Style 7 Cluster

Ceiling Form

Style 7 is the same as Style 1 with an indicating single pole snap switch added.

This switch has a metal key and is not affected by the heat of the lamps.



Polished Brass is standard finish and will be furnished unless otherwise ordered.

Made in Edison base only.

Style 7 Cluster 4-inch diameter

Put up 6 in a box

Cat.								(Cluster body only	With No. 31 Flange attached	Std. Pkg.
72	2 Light Multiple							94	.\$2.50	\$2.65	12
	3 Light Multiple									2.90	12
	4 Light Multiple									3.15	12
	5 Light Multiple									3.40	12
	6 Light Multiple									3.65	12

The Cluster attaches to ceiling with ordinary wood screws and any of the Special Metal Reflectors (of corresponding style No.) fit Cluster back without shade holders.

This Cluster can be attached direct to outlet box by using No. 3124 Flange made to fit Bossert boxes.

Where it is desired to use the Cluster in pendant form it is necessary to attach one of the following Flanges. No. 3100 Flange will be attached at factory if so ordered.

Style 7 Flange Backs with Screws Attached



Tapped %-inch-Cat. No. 3100





Tapped 1/2-inch - Cat. No. 3150

Paper washers are used under heads of screws to protect the porcelain base.

Cat.		List Price each	Std. Pkg.
3100	Flange tapped for #-inch pipe	\$0.15	24
3123	Flange for attaching to 3-inch outlet box	.15	24
3124	Flange for attaching to 4-inch outlet box	.15	24
3150	Flange tapped for #-inch pipe	.20	24
3175	Flange tapped for 4-inch pipe	.20	24

NATIONAL CODE STANDARD

Style 7 Cluster

Ceiling Forms



For Reflectors see page 62.



Style 7 R

Metal Reflectors used with ceiling form (Style 7) fit Cluster back and are placed between same and ceiling.

	~ 3		
Cat.	T114—14-inch Tin Reflector shown	List Price, complete	Std. Pkg.
72A	2 Light Multiple with A114 14-inch Aluminum Reflector	\$3.90	12
73A	3 Light Multiple with A114 14-inch Aluminum Reflector	4.15	12
74A	4 Light Multiple with A114 14-inch Aluminum Reflector	4.40	12
75A	5 Light Multiple with A114 14-inch Aluminum Reflector		12
76A	6 Light Multiple with A114 14-inch Aluminum Reflector	4.90	12
72M	2 Light Multiple with M114 14-inch Mirror Reflector		12
73M	3 Light Multiple with M114 14-inch Mirror Reflector	4.10	12
74M	4 Light Multiple with M114 14-inch Mirror Reflector	. 4.35	12
75M	5 Light Multiple with M114 14-inch Mirror Reflector	4.60	12
76M	6 Light Multiple with M114 14-inch Mirror Reflector	4.85	12
72T	2 Light Multiple with T114 14-inch Tin Reflector	3.00	12
73T	3 Light Multiple with T114 14-inch Tin Reflector	3.25	12
74T	4 Light Multiple with T114 14-inch Tin Reflector	3.50	12
75T	5 Light Multiple with T114 14-inch Tin Reflector	3.75	12
76T	6 Light Multiple with T114 14-inch Tin Reflector	1 00	12
72H	2 Light Multiple with H114 14-inch Enameled Steel Reflector	4.50	12
73H	3 Light Multiple with H114 14-inch Enameled Steel Reflector	4.75	12
74H	4 Light Multiple with H114 14-inch Enameled Steel Reflector		12
75H	5 Light Multiple with H114 14-inch Enameled Steel Reflector		12
76H	6 Light Multiple with H114 14-inch Enameled Steel Reflector		12
	B		

Cluster with No. 100 Sub-base and Reflector. For Sub-base see page 57.



The rubber rings on the Sub-base form a bearing surface for the Reflector and prevent its contact with metal at any point, thereby lessening breakage.

Style 700 R

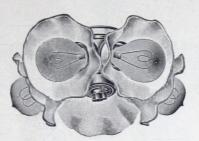
Cat.	P32514-14-inch Opal Reflector shown	List Price, complete	Std. Pkg
10072 2 Lt. Mult. with	No. 100 Sub-base, no Reflector	. \$3.20	12
10073 3 Lt. Mult. with	No. 100 Sub-base, no Reflector	3.45	12
10074 4 Lt. Mult. with	No. 100 Sub-base, no Reflector	3.70	12
10075 5 Lt. Mult. with	No. 100 Sub-base, no Reflector	3.95	12
10076 6 Lt. Mult. with	No. 100 Sub-base, no Reflector	4.20	12
	No. 100 Sub-base and P32514 14-in. Opal Reflecto		12
10073P 3 Lt. Mult. with	No. 100 Sub-base and P32514 14-in. Opal Reflecto	r 4.05	12
	No. 100 Sub-base and P32514 14-in. Opal Reflecto		12
	No. 100 Sub-base and P32514 14-in. Opal Reflecto		12
10076P 6 Lt. Mult. with	No. 100 Sub-base and P32514 14-in. Opal Reflecto	r 4.80	12
	No. 100 Sub-base and X3251414-in. X-Ray Reflection		12
10073X 3 Lt. Mult. with	No. 100 Sub-base and X3251414-in. X-Ray Reflection	ctor 5.45	12
10074X 4 Lt. Mult. with	No. 100 Sub-base and X3251414-in. X-Ray Reflection	ctor 5.70	12
10075X 5 Lt. Mult. with	No. 100 Sub-base and X3251414-in. X-Ray Reflection	ctor 5.95	12
10076X 6 Lt. Mult. with	No. 100 Sub-base and X3251414-in. X-Ray Reflection	ctor 6.20	12

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Style 7 Cluster

Ceiling Forms-continued

Cluster with individual shades for each lamp opening.



Cluster attaches directly against ceiling without stem.

Style 7 S

G2255-Opal Shades shown.

Cat.	Appropriate Shade Holders are includ		ist Price Complete	Std. Pkg
72G	2 Light Multiple with G2255 24x5 Opal Shades.		\$3 10	12
72N	2 Light Multiple with N2256 24x6 X-Ray Shades		4 70	12
	2 Light Multiple with V1505 1 x5 Pagoda Shades		4.20	12
72V	2 Light Multiple with D1506 14x5 Diffusing Shade		4.30	12
72D	2 Light Multiple with D1506 1½x5 Diffusing Shade			
73G	3 Light Multiple with G2255 24x5 Opal Shades.		3.65	12
73N	3 Light Multiple with N2256 24x6 X-Ray Shades			12
73V	3 Light Multiple with V1505 12x5 Pagoda Shades		- 00	12
	3 Light Multiple with D1506 1½x5 Diffusing Shade			12
73D	3 Light Multiple with Diood 1920 Billiams			
74G	4 Light Multiple with G2255 21x5 Opal Shades.		4.20	12
74N	4 Light Multiple with N2256 21x6 X-Ray Shades		7.40	12
74V	4 Light Multiple with V1505 11x5 Pagoda Shades		6.40	12
	4 Light Multiple with D1506 11x5 Diffusing Shade		0 00	12
74D	4 Light Multiple with Disco 1248 Distants			
75G	5 Light Multiple with G2255 24x5 Opal Shades.		4.75	12
75N	5 Light Multiple with N2256 21x6 X-Ray Shades		8.75	12
75V	5 Light Multiple with V1505 1½x5 Pagoda Shades		7.50	12
	5 Light Multiple with D1506 11x5 Diffusing Shad	es	7.75	12
75D				10
*76V	6 Light Multiple with V1505 11x5 Pagoda Shades		8.60	12

*Other Standard Shades are of too large diameter to permit their use with Style 7 (6-Light) Cluster.

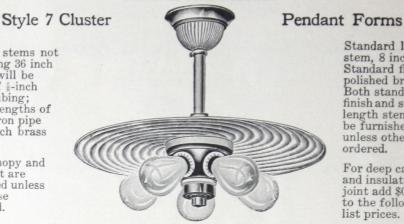
For other supporting means see page 23.

For Shade Holders see page 59. For Shades see page 61.

Fixture stems not exceeding 36 inch length will be made of &-inch brass tubing; longer lengths of §-inch iron pipe and §-inch brass casing.

Low canopy and crowfoot are furnished unless otherwise specified.

Cat.



Standard length stem, 8 inches. Standard finish, polished brass. Both standard finish and standard length stem will be furnished unless otherwise ordered.

For deep canopy and insulating joint add \$0.70 to the following list prices.

List Price.

Std.

Style	07	R	
X32514 - X-Ray	Refl	ector	shown

070	complete	Pkg.
072	2 Light Multiple without Reflector or Holder	4
073	3 Light Multiple without Reflector or Holder	but
074	4 Light Multiple without Reflector or Holder	
075		o o
076	6 Light Multiple without Reflector or Holder 4 .00	10
	Appropriate Shade Holders are included in following group	Reflectors, ge.
072P	2 Light Multiple with P32514 14-inch Porcelain Reflector	fle
072X	2 Light Multiple with X32514 14-inch X-Ray Reflector 5 55	e e
072E	2 Light Multiple with E32514 14-inch Diffusing Reflector . 5 95	H &
073P	2 Light Multiple with Booth 14 inch Dillusing Reflector 5.95	or
073X	3 Light Multiple with P32514 14-inch Porcelain Reflector 4 40	3 3
073E	3 Light Multiple with X32514 14-inch X-Ray Reflector . 5 80	de P
	5 Light Multiple with £32514 14-inch Diffusing Reflector 6 20	out Shades or Retandard Package.
074P	4 Light Multiple with P32514 14-inch Porcelain Reflector 4 65	Sas
074X	4 Light Multiple with X32514 14-inch X-Ray Reflector	th
074E	4 Light Multiple with £52514 14-inch Diffusing Reflector 6 45	on
075P	5 Light Multiple with P32514 14-inch Porcellain Poffeston	without e a Stan
075X	5 Light Multiple with X32514 14-inch X-Ray Reflector	wit
075E	5 Light Multiple with X32514 14-inch X-Ray Reflector 6 30 5 Light Multiple with E32514 14-inch Diffusing Reflector 6 70	or
076P	6 Light Multiple with P32514 14-inch Porcelain Reflector 5 15	with or w
076X	6 Light Multiple with 132314 14-inch Forcelain Reflector 5.15	with
076E	6 Light Multiple with X32514 14-inch X-Ray Reflector 6.55	it ii
OIOL	6 Light Multiple with E32514 14-inch Diffusing Reflector . 6.95	
070 4	The Special Reflectors in following group fit Cluster back and require no shade holders	Fixtures, canopies,
UIZA	2 Light Multiple with A114 14-inch Aluminum Reflector 4 65	re
07211	2 Light Multiple with M114 14-inch Mirror Reflector . 4 60	op op
0121	2 Light Multiple with T114 14-inch Tin Reflector	Fixtures, canopies,
073A		
OTOM	3 Light Multiple with M114 14-inch Mirror Reflector . 4 85	and
073T	3 Light Multiple with T114 14-inch Tin Reflector 4 85 4 00	st
074A	4 Light Multiple with A114 14-inch Aluminum Reflector 5.15	Cluster ems and
074M		
074T	4 Light Multiple with M114 14-inch Mirror Reflector	st
	5 Light Multiple with 1114 14-inch Tin Reflector 4 25	h
075M	5 Light Multiple with A114 14-inch Aluminum Reflector 5 40	Assorted e with st
075T	5 Light Multiple with M114 14-inch Mirror Reflector 5 40	SS
0101		A ete
076A	6 Light Multiple with A114 14 inch Aluminum Defect	24 ple
OLOM	U Light Williams With Will A IA-inch Misson Dofforton	H H
076T	Digital Multiple with 1114 14-inch Tin Reflector.	24 As complete
	For Shade Holders see page 59. For Reflectors see page 62.	
Ant	PUTIONAL LENGTH CORRECTION See page 62.	

ADDITIONAL LENGTH STEM. Lengths up to 36 inch (%-inch brass tubing), 30c foot list, Over 36 inches long (%-inch iron pipe and casing), 45c foot list.

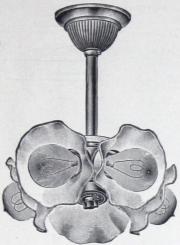
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Style 7 Cluster

Pendant Forms-continued

Fixture stems (not exceeding 36-inch length) will be made of \(\frac{8}{2}\)-inch brass tubing—longer lengths of \(\frac{8}{2}\)-inch iron pipe and \(\frac{8}{2}\)-inch brass casing.

Low canopy and crowfoot are furnished unless otherwise specified.



Style 07 S G2255 Opal Shades shown

Standard length stem, 8-inch. Standard finish, polished brass. Both standard finish and

Both standard finish and standard length stem will be furnished unless otherwise ordered.

For deep canopy and insulating joint add \$0.70 to the following list prices.

0.1	G2200 Opar Shades shown		
Cat.		List Price, complete	Std. Pkg.
072 073	2 Light Multiple without Shades or Holders	\$3.25	reflectors, Standard
074 075	4 Light Multiple without Shades or Holders	. 3 75	flec
076	5 Light Multiple without Shades or Holders 6 Light Multiple without Shades or Holders	$\begin{array}{cccc} & 4 & 00 \\ & 4 & 25 \end{array}$	a s
.==~	Appropriate Shade Holders are included with the following:		
072G 072N	2 Light Multiple with G2255 2‡x5 Opal Shades 2 Light Multiple with N2256 2‡x6 X-Ray Shades		without shades pies, constitute
072V	2 Light Multiple with V1505 11x5 Pagoda Shades	4.95	out
072P	2 Light Multiple with P1506 12x5 Diffusing Shades	5.05	or with
073G 073N	3 Light Multiple with G2255 2½x5 Opal Shades 3 Light Multiple with N2256 2½x6 X-Ray Shades	4.40	oranoj
073V	3 Light Multiple with V1505 1 x5 Pagoda Shades	. 6.05	fixtures, with or stems and cano
073P	3 Light Multiple with P1506 11x5 Diffusing Shades		es, v
074G 074N	4 Light Multiple with G2255 24x5 Opal Shades 4 Light Multiple with N2256 24x6 X-Ray Shades	4.95 8.15	ctur
074V	4 Light Multiple with V1505 11x5 Pagoda Shades	7.15	r ft
074P	4 Light Multiple with P1506 12x5 Diffusing Shades	7.35	cluster;
075G 075N	5 Light Multiple with G2255 2½x5 Opal Shades 5 Light Multiple with N2256 2½x6 X-Ray Shades	5.50	assorted complete
075V	5 Light Multiple with V1505 1 x5 Pagoda Shades	8.25	sort mpl
075P	5 Light Multiple with P1506 1½x5 Diffusing Shades	. 8 50	tas co kage
*076V	6 Light Multiple with V1505 1½x5 Pagoda Shades	. 9.35	24 ass but cor Package

*Other Standard Shades are of too large diameter to permit their use with Style 7 6-Light Cluster.

> For Shade Holders see page 59 For Shades see page 61

ADDITIONAL LENGTH STEM. Lengths up to 36-inch (%-inch brass tubing) 30c foot, list. Over 36 inches long (%-inch iron pipe and casing) 45c foot, list.

These Clusters are composed of a neatly designed metal shell with openings in which are located porcelain lamp receptacles of special design. The receptacles are so arranged in the Cluster that they can be easily connected, either in series or parallel.

All style 600 Clusters are pro-All style 600 Clusters are provided with a casting tapped to receive stem. 608-612 inclusive tapped for %-inch pipe, and 615-620 inclusive, tapped for ½-inch iron pipe. No means are provided for attaching to ceiling without stem.



Polished brass finish is standard, and will be furnished un-Aluminum bodies furnished at same price, if preferred.

Made in Edison base only.

Style 600 Cluster

No. 608 Cluster shown

Cat.	Put up one in a box	List Price	Std. Pkg.
608	8 Light Cluster 64-inch diameter	\$5.00	6
610	10 Light Cluster 84-inch diameter	5.60	6
	12 Light Cluster 8\(\frac{3}{4}\)-inch diameter		-6
615	15 Light Cluster 114-inch diameter, 15 and 0	8.00	6
616	16 Light Cluster 113-inch diameter, 12 and 4	8.40	6
	20 Light Cluster 113-inch diameter, 15 and 5		6

For special finishes see page 63

See cut next page for grouping of lamps 16 to 20 lights

All style 600 Clusters are pro-All style ob Clusters are provided with a casting tapped to receive stem. 608-612, inclusive, tapped for % inch iron pipe, and 615-620, inclusive, tapped for %-inch iron pipe. No means are provided for attaching to ceiling without stem.



Polished brass finish is standard, and will be furnished unless otherwise ordered.

Aluminum bodies furnished at same price if preferred. Made in Edison base only.

Style 600 R

PM60024-Plain Edge Mirror Reflector shown

1 MOODE 1 Main Eage Millor Reflector Shown	
List Price, St complete Pk	
608PM 8 Lt. Clus. 6\(\frac{2}{4}\)-in. dia. with PM60024 24-in. Pl. Edge Mirror Refl \$9 50	6
610PM 10 Lt. Clus. 83-in. dia. with PM60024 24-in. Pl. Edge Mirror Refl 10.10	6
612PM 12 Lt. Clus. 83-in. dia. with PM60024 24-in. Pl. Edge Mirror Refl 10.70	6
615PM 15 Lt. 15 and 0 113-in. dia. with PM60030 30-in. Pl. Edge Mirror Refl. 15.10	6
616PM 16 Lt. 12 and 4 11\(\frac{3}{4}\)-in, dia. with PM60030 30-in, Pl. Edge Mirror Refl. 15.50	6
620PM 20 Lt. 15 and 5 113-in. dia. with PM60030 30-in. Pl. Edge Mirror Refl. 17.10	6
608BM 8 Lt. Clus. 63-in. dia. with BM60024 24-in. Bdr. Edge Mirror Refl 13.00	6
610BM 10 Lt. Clus. 84-in. dia. with BM60024 24-in. Bdr. Edge Mirror Refl 13 60	6
612BM 12 Lt. Clus. 83-in. dia. with BM60024 24-in. Bdr. Edge Mirror Refl 14.20	6
615BM 15 Lt. 15 & 0 113-in. dia. with BM60030 30-in. Bdr. Edge Mirror Refl. 19.00	6
616BM 16 Lt. 12 & 4 113-in. dia. with BM60030 30-in. Bdr. Edge Mirror Refl. 19.40	6
620BM 20 Lt. 15 & 5 11\(\frac{3}{4}\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Refl. 21 00	6

This Cluster is especially adapted for lighting public buildings, such as Churches, Halls, Etc.





Polished brass finish is standard and will be furnished unless otherwise ordered. Aluminum bodies will be furnished at same price, if preferred.

Style 0600 R

BM60030 Border Edge Mirror Reflector Shown

	List Price, Std. complete Pkg
 8 Light Cluster 6¾-inch diameter without Reflector 10 Light Cluster 8¾-inch diameter without Reflector 12 Light Cluster 8¾-inch diameter without Reflector 	2 20 Packa
15 Light 15 and 0 113-inch diameter without Reflector 16 Light 12 and 4 113-inch diameter without Reflector 20 Light 15 and 5 113-inch diameter without Reflector	ad oo ste
0608PM 8 Lt. Cluster 6\(\frac{3}{4}\)-in. dia. with PM60024 24-in. Pl. Edge Mirror Refl 0610PM 10 Lt. Cluster 8\(\frac{3}{4}\)-in. dia. with PM60024 24-in. Pl. Edge Mirror Refl 0612PM 12 Lt. Cluster 8\(\frac{3}{4}\)-in. dia. with PM60024 24-in. Pl. Edge Mirror Refl	. 11.10
0615PM 15 Lt. 15 & 0 113-in. dia. with PM60030 30-in. Pl. Edge Mirror Ref. 0616PM 16 Lt. 12 & 4 113-in. dia. with PM60030 30-in. Pl. Edge Mirror Ref. 0620PM 20 Lt. 15 & 5 113-in. dia. with PM60030 30-in. Pl. Edge Mirror Ref.	1. 10.10
0608BM 8 Lt. Clus. 6\(^3\)-in. dia. with BM60024 24-in. Bdr. Edge Mirror Ref. 0610BM 10 Lt. Clus. 8\(^3\)-in. dia. with BM60024 24-in. Bdr. Edge Mirror Ref. 0612BM 12 Lt. Clus. 8\(^3\)-in. dia. with BM60024 24-in. Bdr. Edge Mirror Ref.	d. 14 00 step of the step of t
0615BM 15 Lt. 15&0 11\(^8\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Ref. 0616BM 16 Lt. 12&4 11\(^8\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Ref. 0620BM 20 Lt. 15&5 11\(^8\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Ref. 0620BM 20 Lt. 15&5 11\(^8\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Ref. 0620BM 20 Lt. 15&5 11\(^8\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Ref. 0620BM 20 Lt. 15&5 11\(^8\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Ref. 0620BM 20 Lt. 15&5 11\(^8\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Ref. 0620BM 20 Lt. 15&5 11\(^8\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Ref. 0620BM 20 Lt. 15&5 11\(^8\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Ref. 0620BM 20 Lt. 15&5 11\(^8\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Ref. 0620BM 20 Lt. 15&5 11\(^8\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Ref. 0620BM 20 Lt. 15&5 11\(^8\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Ref. 0620BM 20 Lt. 15&5 11\(^8\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Ref. 0620BM 20 Lt. 15&5 11\(^8\)-in. dia. with BM60030 30-in. Bdr. Edge Mirror Ref. 0620BM 20 Lt. 15&5 11\(^8\)-in. dia.	A. 20 20 sg d d d d d d d d d d d d d d d d d d

Additional Length Stems

coo c10 inclusivo &	-inch iron pipe and 4-inch brass casing	30.45 ft. list
608-612 inclusive, $\frac{1}{2}$	inch iron pipe and 1 inch brass casing.	60 ft. list

Arc-Burst

The Arc Lamp Displacer Style C

Ceiling Form

In this new style Arc-Burst the highest point of illumination is attained, with few of the disadvantages that accompany the use of other light producers. The brilliant, yet noticeably soft and steady light of the Arc-Burst suggests its use for a wide range of conditions where satisfactory results are difficult to obtain, and compared with the flickering and unsteady burning of even an up-to-date Arc-Lamp, its merits are at once apparent.

A Special Benjamin Wireless Cluster forms the base of the Arc-Burst, around which are placed high efficiency meridian type lamps together with appropriate reflec-

tors, so designed and placed in relation to the lamps that the light produced is radiated

in the most effective manner.

Each Arc-Burst contains one 50 C. P. lamp in the bottom opening, which, together with its accompanying diffusing reflector, adds greatly to the cluster value, both as to the appearance and actual light distribution.

The Turn Down Feature

The Arc-Burst can be furnished with a Turn Down feature (designated by the letter "Y" following Cat. No.) which consists of isolating the centre lamp by means of a three wire connection in cluster body, whereby such lamp can be operated independently of the side lights by the use of a suitable switch.

Style C

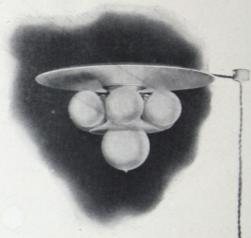
This type of Arc-Burst is essentially a low ceiling cluster particularly applicable to stores, restaurants, etc., in basements or places where it is not desirable to use a stem. The cluster body is finished in frosted aluminum to conform with the white appearance of

the lamps and reflectors.

Style "C" Arc-Burst consists of a cluster body, ceiling block, shade holders, reflectors and frosted meridian type lamps (25 C. P. in circle and 50 C. P. in

bottom).

The special shade holders employed in the Arc-Burst permit the removal of all reflectors without disturbing the electrical connections.



18 inches diameter, 11 inches deep

LIST PRICES STYLE C ARC-BURST

CLIN N. AT	T. 1 C. D.	Complete with Lamps		Complete less	Standard	
Cat. No.	at, No. of Lamps	Total C. P.	90-130 Volts	200-250 Volts	Lamps only	Package
C 43	3	100	\$ 9 50	\$10 50	\$6 55	
C 44	4	125	10 60	11 80	6 80	ge ite
C 45	5	150	11 70	13 10	7 05	tu ta
C 46	6	175	12 80	14 40	7 30	fixture
C 47	7	200	13 90	15 70	7 55	fixtures onstitute package
	With Tur	a Down Featur	e "Y" (3-wire co	onnection)		lete, c
C 43 Y	3	100	9 80	10 80	6 85	24 complassorted
C 44 Y	4	125	10 90	12 10	7 10	ort
C 45 Y	5	150	12 00	13 40	7 35	00 00
C 46 Y	6	175	13 10	14 70	7 60	22 88
C 47 Y	7	200	14 20	16 00	7 85	

For pendant switch with 3 ft. lamp cord add \$1.00 list to above prices. Additional

Specify Lamp Voltage. Prices do not include cord or switch. For lamp renewals see page 33.

Not responsible for damage to goods after leaving our hands.

Arc-Burst - Continued

Style D

Consists of Cluster

Body, Flange, 15-in.

Stem (8-in. iron pipe

Canopy, Crowfoot,

and 4-in. brass

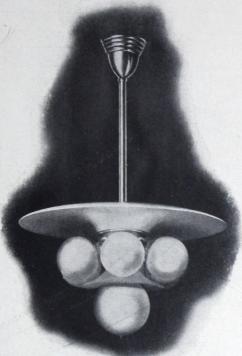
casing), 41x4-in.

Shade Holders,

Reflectors and Lamps.

Fixture Form

Wired ready to hang



The special shade holders employed on the Arc-Burst permit the removal of all reflectors without disturbing electrical connections.

Style D

18 inches diameter, 25 inches over all LIST PRICES STYLE D ARC-BURST

Cat. No. No. o			Complete	Complete	
	No. of Lamps	Total C. P.	90-130 Volts	200-250 Volts	less Lamps only
D43	3	100	\$11 00	\$12 00	\$8 05
D44	4	125	12 10	13 30	8 30
D45	5	150	13 20	14 60	8 55
D46	6	175	14 30	15 90	8 80
D47	7	200	15 40	17 20	9 05
	With	Turn Down Fea	ture "Y" (3 wire co	onnection)	
D43Y	3	100	11 40	12 40	8 45
D44Y	4	125	12 50	13 70	8 70
D45Y	5	150	13 60	15 00	8 95
D46Y	6	175	14 70	16 30	9 20
D47Y	7	200	15 80	17 60	9 45

For pendant switch with 3-foot lamp cord add \$1 00 list to above prices. Additional cord 12c yard list.

Specify lamp voltage. For lamp renewals see page 33.

Frosted lamps will be furnished unless otherwise ordered.

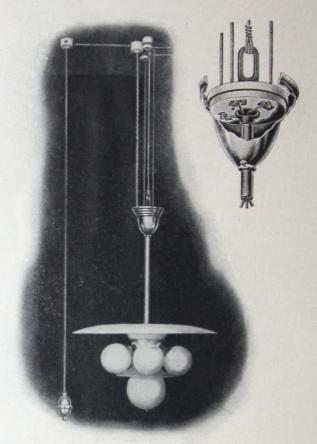
Extra length stem 50c per foot, list, including extra wire.

Ready to hang in place of Arc-Lamp without additional wiring

Type E consists of cluster body, flange, 15-inch stem (iron pipe and casing), canopy, porcelain connecting block (in canopy), hickey, loop, reflectors, shade holders and lamps, wired ready to hang.

Install as you would an arclamp; the connections are made on the under side of the connecting block, to which access is gained by lowering the canopy.

The special shade holders employed in the Arc-Burst permit the removal of all reflectors without disturbing the electrical connections.



18 inches diameter, 28 inches over all

LIST PRICES STYLE E ARC-BURST

Cat. No. No. of Lamps	No of Lamps	Total C. P.	Complete v	vith Lamps	Complete less	Standard
	Total C. F.	90-130 Volts	200-250 Volts	Lamps only	Package	
E43	3	100	\$11 90	\$12 90	\$8 95	
E44	4	125	13 00	14 20	9 20	tes ge
E45	5	150	14 10	15 50	9 45	tut
E46	6	175	15 20	16 80	9 70	ck zit
E47	7	200	16 30	18 10	9 95	finst nst
	With Tur	n Down Featur	e "Y" (3-wire co	onnection)		co
E43Y	3	100	12 30	13 30	9 35	pl da,da
E44Y	4	125	13 40	14 60	9 60	comp
E45Y	5	150	14 50	15 90	9 85	col
E46Y	6	175	15 60	17 20	10 10	24
E47Y	7	200	16 70	18 50	10 35	C4 C0 CO

For pendant switch with 3-foot lamp cord add \$1.00 list to above prices. Additional cord 12c yard list. Specify lamp voltage.

For lamp renewals see page 33.

Not responsible for condition of goods after shipment. Delivery in good order to transportation company considered as delivery to purchaser.

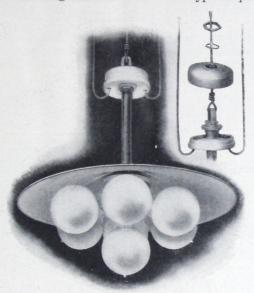
Arc-Burst

Style F

Weatherproof Forms

The enormous demand for an out-door Arc-Burst resulted in the conception of the Style F shown herewith.

The cluster is wired up to the connection block at end of stem, which is provided with a removable aluminum cap to fit and lock over same, making the cluster absolutely weatherproof. Style F consists of cluster body, flange, 18 inch white porcelain enameled steel reflector, 8 inch stem (½ inch iron conduit), porcelain connecting block with stem wires attached, suspension fitting and 25 C. P. meridian type lamps.



18 inches diameter, 20 inches over all.

LIST PRICES STYLE F ARC-BURST

Cat. No.	No. of Lamps	Total C. P.	Complete	with Lamps	Complete less	Standard	
Cat. No.	No. of Lamps	Total C. P.	90-130 Volts	200-250 Volts	Lamps only	Package	
F 43	3	75	\$10 10	\$10.70	\$7 55		
F 44	4	100	11 20	12 00	7 80	cor	
F 45	5	125	12 30	13 30	8 05	uples ed ed ard	
F 46	6	150	13 40	14 60	8 30	ontro	
F 47	7	175	14 50	15 90	8 55	14 clixt	

Net Renewal Prices

Description of Part	Standard	Package	Broken Packages			
Description of Part	90-130 Volts	200-250 Volts	90-130 Volts	200-250 Volts		
No. 1. 25 C. P. tipped meridian type lamps No. 2. 50 C. P. tipped	\$0 37	\$0 47	\$0 45	\$0 55		
meridian type lamps	55	70	65	80		

No. 37. Prismatic Reflectors . 50c each No. 81. 18-inch Opal Diffusing Reflector \$1.00

24 fixtures (assorted) constitute standard package. 24 lamps of one voltage and one C. P. constitute a standard package. Not responsible for damage to goods after leaving our hands.

Arc-Burst

Weatherproof Fixtures

Style H

Bracket Form

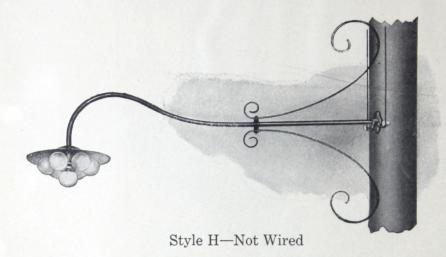
This form of Arc-Burst fixture is the same as Style F except in the form of support, and is suitable for all conditions of out-door lighting.

Your boulevards would look well lighted with this fixture attached to suitable lamp

posts.

Consists of cluster body, flange, reducer, 18-inch porcelain enameled steel shade, bracket, pole fitting and meridian type lamps (frosted or clear).

Bracket overhangs 51 feet and is made of 4 inch iron pipe.



CLUSTER COMPLETE WITH BRACKET

Cat. No.	No of Lames	Total C. P.	Complete v	with Lamps	Complete less	Standard
Cat. No.	No. of Lamps	Total C. P.	90-130 Volts	200-250 Volts	Lamps only	Package
H 43 H 44 H 45 H 46 H 47	3 4 5 6 7	75 100 125 150 175	\$ 9 90 11 00 12 10 13 20 14 30	\$10 50 11 80 13 10 14 40 15 70	\$7 35 7 60 7 85 8 10 8 35	e fixtures constitute package
		Cluster Compl	ete less Bracket			rd
J 43 J 44 J 45 J 46 J 47	3 4 5 6 7	75 100 125 150 175	\$ 7 40 8 50 9 60 10 70 11 80	\$ 8 00 9 30 10 60 11 90 13 20	\$4 85 5 10 5 35 5 60 5 85	24 complete assorted, co

Bracket only, including pole fitting, \$2.50 Standard package, 24.

Where Arc-Burst fixtures are ordered complete with lamps, frosted lamps will be furnished unless otherwise specified.

For lamp renewals see preceding page.

Weatherproof Forms

Cluster Body, 3-inch Diameter, Style 2 Multiple Cluster Body, 3-inch Diameter, Style 21/2 Series

The Weatherproof Clusters listed hereunder are especially suited for out-door light-

ing and for mines, subways, etc., where the atmosphere is moist and damp.

The Socket Shells are of Copper, the Casings of Polished Aluminum and the Clusterback sealed by a flange bolted thereto, which is tapped for ½-inch pipe. The Reflectors are made of heavy steel, enameled white inside and outside with best bath-tub enamel insuring white reflecting surface and long wear. Tapped for ½-inch pipe only.

W. P. Cluster and Flange with Enameled Steel Reflector only, no pipe included.



Polished Aluminum Casings for W. P. Cluster Bodies will be furnished unless otherwise ordered.

15-inch Enameled Steel Reflector. Cluster Base 3-inch Diameter

Cat. No. 4022	2 Light Multiple, Style 2 Cluster Body							c	ist Price, complete \$3.40	Std. Pkg. 24
4023 4024	3 Light Multiple, Style 2 Cluster Body 4 Light Multiple, Style 2 Cluster Body								3.65	24 24
$4022\frac{1}{2} \\ 4023\frac{1}{2}$	2 Light Series, Style 2½ Cluster Body 3 Light Series, Style 2½ Cluster Body									24 12

For Reflectors see page 61

W. P. Cluster and Flange with Enameled Steel Reflector, Gooseneck and Fitting. Gooseneck overhang 30 inches. Curved fitting for pole use is standard and will be furnished unless otherwise ordered.

Polished Aluminum Casings for W.P. Cluster Bodies will be furnished unless otherwise ordered.

Style 502

15-inch Enameled Steel Reflector. Cluster Base 3-inch Diameter Cluster Body with Gooseneck, Fitting and 15-inch Enameled Steel Reflector

Cat. No.		List Price, complete	Std. Pkg.
5022	2 Light Multiple, Style 2 Cluster Body	\$4.30	or or or ms
5023	3 Light Multiple, Style 2 Cluster Body	4.55	The the des t cc t cc ste ste cc t cc t cc t cc t
5024	4 Light Multiple, Style 2 Cluster Body	4.80	wi wi sha
5022½ 5023½	2 Light Series, Style 2½ Cluster Body 3 Light Series, Style 2½ Cluster Body		24 assorte fixtures. without reflectors, plete will and fitting and fitting and fitting a Package.

For Gooseneck and Fittings see page 60 For Reflectors see page 61

W. P. Cluster and Flange with Enameled Steel Reflector and Suspension Fittings. Standard length pipe 8-inch.



Polished Aluminum Casings for W. P. Cluster Bodies will be furnished unless otherwise ordered.

Style 602

15-inch Enameled Steel Reflector. Cluster Base 3-inch Diameter Cluster Body with Suspension Fittings and 15-inch Enameled Steel Reflector

Cat. No. 6022 6023 6024	2 Light Multiple, Style 2 Cluster Body 3 Light Multiple, Style 2 Cluster Body 4 Light Multiple, Style 2 Cluster Body	4.15	ed Cluster with or shades or As ith stems with stems in stems in stems in Standard
6022½ 6023½	2 Light Series, Style 22 Cluster Body 3 Light Series, Style 22 Cluster Body		24 assort fixtures, without reflectors plete w and fitti stitute a Package.

For Fittings see page 60

Cluster and Flange with Enameled Steel Reflector only, no pipe included.



Style 401

Aluminum finish for W. P. Cluster Bodies is standard and will be furnished unless otherwise ordered.

15-inch Enameled Steel Reflector, Cluster Base, 4-inch diameter Cluster Body with Back Flange and Enameled Steel Reflector

Cat. No. 4012 4013 4014 4015 4016	2 Light Multiple, Style 1 Cluster Body 3 Light Multiple, Style 1 Cluster Body 4 Light Multiple, Style 1 Cluster Body 5 Light Multiple, Style 1 Cluster Body 6 Light Multiple, Style 1 Cluster Body	3 95 4 20 4 45	Std. Pkg. 12 12 12 12 24 24
$4013\frac{1}{2}$ $4014\frac{1}{2}$	Dody	. 4.05	12 12 12 12 24

For Reflectors see page 61

W. P. Cluster and Flange with Enameled Steel Reflector, Gooseneck and Fittings. Gooseneck overhang 30 inches. Curved fitting for pole use is standard and will be furnished unless otherwise ordered.



Polished Aluminum Casings for W. P. Cluster Bodies will be furnished unless otherwise ordered.

Style 501

15-inch Enameled Steel Reflector, Cluster Base 4-inch Diameter Cluster Body with Gooseneck and Fittings, 15-inch Enameled Steel Reflector

Cat. No.	List Price Std. Complete Pkg.
5012 2 Light Multiple, Style 1 Cluster Body	\$4.60 s 5 5 4 a
5013 3 Light Multiple, Style 1 Cluster Body	4 85 Es
5014 4 Light Multiple, Style 1 Cluster Body	2000
5015 5 Light Multiple, Style 1 Cluster Body	5 35 th of
5016 6 Light Multiple, Style 1 Cluster Body	kage kage
5012½ 2 Light Series, Style 1½ Cluster Body	
5013\frac{1}{2} 3 Light Series, Style 1\frac{1}{2} Cluster Body	
5014 4 Light Series, Style 1 Cluster Body	
50151 5 Light Series, Style 11 Cluster Body	with refigure 24 27 2 24 2 24 2 24 2 24 2 24 2 24 2

For Goosenecks and Fittings see page 60.



Style 601

15-inch Porcelain Enameled Steel Reflector Cluster Base 4-inch Diameter

Cluster Body with Suspension Fittings and 15-inch Enameled Steel Reflector

	Decel Reflector	
Cat. No.		Std. Pkg.
6012	2 Light Multiple, Style 1 Cluster Body \$4 20 \$5	th
6013	3 Light Multiple, Style 1 Cluster Body 4.45	wititi
6014	4 Light Multiple, Style 1 Cluster Body 4.70 23	ons
6015	5 Light Multiple, Style 1 Cluster Body 4 95 5	ple c
6016	6 Light Multiple, Style 1 Cluster Body	ngs
	O TO	itti
$6012\frac{1}{2}$	2 Light Series, Style 11 Cluster Body. 4.25	bu f
$6013\frac{1}{2}$	3 Light Series, Style 1½ Cluster Body	s, and lare
$6014\frac{1}{2}$	4 Light Series, Style 1½ Cluster Body 4 80 4 80	tor
6015}	5 Light Series, Style 1½ Cluster Body	flec ster
	For Fittings and name 60	

For Fittings see page 60 For Reflectors see page 61.

Weatherproof Forms

Style 600 Cluster Body

W. P. Cluster and Casting tapped for 1-inch iron pipe, with Enameled Steel Reflector only. No pipe included.



Style 600 Cluster in W. P. Forms will be furnished with Polished Aluminum Casings unless otherwise ordered.
The receptacles are so ar-

The receptacles are so arranged in the body that either series of parallel wiring may be used.

14.50

14.90

16.50

Style 40600

No. 608 W. P. Cluster with 20-inch Enameled Steel Reflector Cluster Body and Tapped Casting with 20-inch Enameled Steel Reflector

Cat. No.	List Price Complete	Std. Pkg.
40608 8 Light Cluster, 6%-inch diameter	\$8 00	6
40610 10 Light Cluster, 81-inch diameter 40612 12 Light Cluster, 81-inch diameter	9 20	6
Cluster Body and Tapped Casting with 24-inch Enameled Stee	l Reflector	
40615 15 Light-15 and 0-114-inch diameter 40616 16 Light-12 and 4-114-inch diameter 40620 20 Light-15 and 5-114-inch diameter For Reflectors see page 61	12 00 12 40	6 6 6
W. P. Cluster and Tapped Casting with Enameled	12 Trimore	
Steel Reflector, Bracket and Fittings, Gooseneck		
Overhang, $5\frac{1}{2}$ feet. Curved Fittings for pole use is standard and will		
be furnished unless otherwise ordered.		
	36	
20000 Par		
Style 50600		
No. 620 W. P. Cluster with 24-inch Enameled Steel Reflector shown		
	ist Price Std.	
Cluster and Bracket with 20-inch Enameled Steel Reflector	a t t kg.	ti- k-
	ritho for 10.2018	pac
50610 10 Light Cluster, 8\(\frac{3}{4}\)-inch diameter 50612 12 Light Cluster, 8\(\frac{3}{4}\)-inch diameter	11 10 11 11 11 11 11 11 11 11 11 11 11 1	ard

For Fittings see page 60. For Reflectors see page 61.

Cluster and Bracket with 24-inch Enameled Steel Reflector

50615 15 Light—15 and 0-113-inch diameter

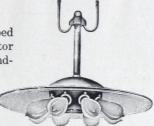
50616 16 Light-12 and 4-114-inch diameter

50620 20 Light-15 and 5-114-inch diameter

Weatherproof Forms-continued

Suspension Form

W. P. Cluster and Tapped Casting with Steel Reflector and Suspension Fittings, standard length pipe -8-inch.



Style 600 Cluster in W. P. Forms will be furnished with Polished Aluminum Casings unless otherwise ordered.

The receptacles are so arranged in the body that either series or parallel wiring may be used.

Style 60600

No. 608 W. P. Cluster with 20-inch Enameled Steel Reflector shown

Cluster complete with 20-inch Enameled Steel Reflector

60608 8 Light Cluster, 6%-inch diameter \$8 50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50	Cat.		List Price	Std.
60610 10 Light Cluster, 8\(\frac{3}{4}\)-inch diameter 9 10 60612 12 Light Cluster, 8\(\frac{3}{4}\)-inch diameter 9 70 Cluster complete with 24-inch Enameled Steel Reflector 60615 15 Light Cluster, 11\(\frac{3}{4}\)-inch diameter 12 50 60616 16 Light Cluster, 11\(\frac{1}{4}\)-inch diameter 12 90	THE RESERVE	0.71.1.01	-	Pkg.
Cluster complete with 24-inch Enameled Steel Reflector 60615 15 Light Cluster, 114-inch diameter 60616 16 Light Cluster, 114-inch diameter 12 50 12 90				th ors
Cluster complete with 24-inch Enameled Steel Reflector 60615 15 Light Cluster, 114-inch diameter 12 50 60616 16 Light Cluster, 114-inch diameter 12 90	60610	10 Light Cluster, 84-inch diameter	. 9.10	w w
60615 15 Light Cluster, 114-inch diameter 12 50 60616 16 Light Cluster, 114-inch diameter 12.90	60612	12 Light Cluster, 83-inch diameter	9.70	or or te
60616 16 Light Cluster, 114-inch diameter				with with sorp
60616 16 Light Cluster, 114-inch diameter	60615	15 Light Cluster, 114-inch diameter	12 50	asse sade m
	60616	16 Light Cluster, 114-inch diameter	12.90	ure sha
To Digit Claster, 114 men diameter		20 Light Cluster, 114-inch diameter		fixt out but s te

For Fittings see page 60. For Reflectors see page 61.

Sockets—Weatherproof

Benco

The All-Weather Socket-Recently Improved

Consists of a 1-piece porcelain receptacle and a 1-piece shell of aluminum or brass, with opening tapped for 1-inch or 1-inch iron pine or conduit.

Wires can be looped in.

Binding screws are accessible from the front.

Used for street railway circuits (indoor and out), street lighting. in mines, factories, engine and boiler rooms, and in numerous places where wires are run in conduit and where unfavorable atmospheric conditions prevail.

Sockets Nos. 4201 and 4203 can be furnished with a &-inch insulating socket with in inch opening to take a reinforced cord. adopting same for drop lights.





0.			

Cat.							List Price	Std. Pkg.
4200	With Aluminum Shell, tapped 1-inch						\$0.70	100
4201	With Aluminum Shell, tapped s-inch						.70	100
4202	With Polished Brass Shell, tapped 1-inch						. 70	100
4203	With Polished Brass Shell, tapped 3-inch						. 70	100
4204	Insulating Socket Bushing \$x\frac{5}{16}-inch						05	100



Benco with Porcelain Enameled Steel Shade

This is the best combination of weather-proof socket and reflector on the market, both reflector and socket being tapped for 1-inch pipe, and each forming a weatherproof joint with the pipe.

Cat.	No. 4210											Pi	ist	Std. Pkg.
4210 4215	Benco with 10-inch Reflector Benco with 15-inch Reflector	:			 						. \$	2	70 70	50 50

Benco with Porcelain Enameled Steel Reflector, Gooseneck and Pole Fitting

The Gooseneck is formed from 3 feet of 1-inch iron pipe and overhangs 30 inches.

Gooseneck and note fitting an

5

	eled black.		1	7									
	eled black.					C	at.	No	, 5	110)		
Cat.												List Price	Std. Pkg.
5110	Complete with 10-inch Reflector											\$2.60	25
5115	Complete with 15-inch Reflector											. 3.60	25

For Weatherproof Fittings see page 60. For Weatherproof Reflectors see page 61.

Benjamin Wireless Car Clusters

As they appear in service



An interior view of a St. Louis Transit Company's Car equipped with Benjamin Car Clusters

The above named company is using several thousand of these clusters in its cars

A partial list of other prominent Railway Companies using Benjamin Wireless Clusters follows:

Boston Elevated Railway Co., Boston, Mass.

Metropolitan Street Railway Co., New York City.

Interborough Rapid Transit Co., New York City.

American Railway Co., Philadelphia and other cities.

Washington Railway and Electric Co., Washington, D. C.

Metropolitan West Side Electric Railway Co., Chicago, Ill.

Chicago Union Traction Co., Chicago, Ill.

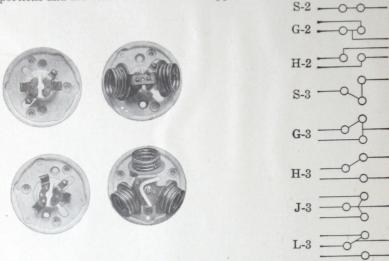
Los Angeles Railway Co., Los Angeles, Cal.

Series—Interior

Style 2½ Cluster

Ceiling Forms

Great care has been taken in designing these series clusters to separate as widely as possible all contacts having a difference of potential; porcelain partitions being provided where necessary, in order to make the insulation as great as possible. The short threaded socket shells (used in Benjamin Wireless Clusters) permit of a wide separation between the inner and outer contacts. The porcelain insulating base thoroughly insulates the live portions and the outer shell from the support used.



The above diagram shows the variety of ways in which these clusters can be furnished. The "S" connection is standard, all others are special.

Extra charge will be made for special connections as follows:
G connection add to list . \$0.05
H connection add to list . . . 10
L connection ad J connection add to list . \$0.15 L connection add to list . . . 15

Made in Edison base only.



Polished Brass is standard finish, and will be furnished unless otherwise ordered.

Style 2½ Cluster

				-	ALLC:	11 (4	Trent	uci	~1				
Cat.										luster body only		No. 3200 attached	Std. Pkg.
221	2 Light Series	(S-2)								\$1.30	\$1	40	24
$23\frac{1}{2}$	3 Light Series	(S-3)	 							1 60	1	70	12
		_											

This cluster can be attached direct to outlet box by using No. 3223 flange. Made to fit Bossert boxes.

Style 21/2 Flange Backs with Screws Attached

				3 8	
Cat. No. 3200 3223	Flange for attaching to 3-ir Flange for attaching to 4-ir	nch outlet box	 	½ inch—Cat. 1 List Price, each \$0.10 \$.10 .15 .15	No. 3250 Std. Pkg. 24 24 24 24

Series—Interior

NATIONAL CODE STANDARD

Style 2½ Cluster Ceiling Forms

Cluster with Reflector. For other supporting means see preceding page.



Metal Reflectors used with ceiling form (Style 2½) fit Cluster back and are placed between same and ceiling.

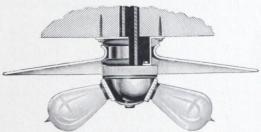
Style 2½ R

A214-14-inch Aluminum Reflector shown

Cat.					List Price, complete	Std. Pkg.
221 A	2 Light Series with A214 14-inch Aluminum Reflector				. \$2.70	24
	3 Light Series with A214 14-inch Aluminum Reflector					12
22½M 23¼M	2 Light Series with M214 14-inch Mirror Reflector 3 Light Series with M214 14-inch Mirror Reflector				. 2.65	24 12
	2 Light Series with T214 14-inch Tin Reflector 3 Light Series with T214 14-inch Tin Reflector				. 1.80	24 12
22.H	2 Light Series with H214 14-inch Enameled Steel Refle 3 Light Series with H214 14-inch Enameled Steel Refle	cto	r.		. 3.30	24 12

For Reflectors see page 62

Cluster with No. 200 Sub-base and Reflector.



The rubber rings on the Sub-base form a bearing surface for the Reflector and prevent its contact with metal, thus forming a firm support for the Shade.

Style 250 R

Car Cluster

Cat. No.	List Price, complete	Std. Pkg.
200221 2 Light Series with No. 200 Sub-base, no Reflector	. \$2.00	24
20023 3 Light Series with No. 200 Sub-base, no Reflector	. 2.30	12
20022 P 2 Light Series with No. 200 Sub-base and 14-inch Opal Reflector	2.60	24
20023 P 3 Light Series with No. 200 Sub-base and 14-inch Opal Reflector	2.90	12
200221X 2 Light Series with 14-inch X-Ray Reflector	4.00	24
20022½ X 2 Light Series with 14-inch X-Ray Reflector 20023½ X 3 Light Series with 14-inch X-Ray Reflector	4.30	12
200231X 3 Light Series with 14-men X-May Reflector		

For Divided Circuits see page 42 For Reflectors see page 62

For Sub-base see page 57

Series-Interior

Style 2½ Cluster

Pendant Form

Fixture stems not exceeding 36-inch length will be made of §-inch brass tubing—longer lengths of §-inch iron pipe and §-inch brass casing.

Low Canopy and Crowfoot are furnished unless otherwise specified.



Style 02½ R

Standard length stem, 8-inch. Standard finish, Polished Brass. Both standard finish and standard length stem will be furnished unless otherwise ordered.

For Deep Canopy and Insulating Joint add 70c to the following list prices.

Cat.	List Price Complete	Std. Pkg.
022½ 2 Light Series—no reflector or holder	\$2.00	ades con-
023½ 3 Light Series—no reflector or holder	. 2.30	
Appropriate shade holders are included.		ie
022½P 2 Light Series with P32514-14-inch Porcelain Reflector .	2.90	without
0221X 2 Light Series with X32514-14-inch X-Ray Reflector	4 30	R
022½E 2 Light Series with E32514—14-inch Diffusing Reflector	4.70	or
0231P 3 Light Series with P32514—14-inch Porcelain Reflector	3.20	with
023½X 3 Light Series with X32514-14-inch X-Ray Reflector	4.60	ste.
023½E 3 Light Series with E32514 -13½-inch Diffusing Reflector	5.00	Fixtures te with age.
The Special Reflectors in following group fit Cluster back and require no shade he	olders.	e wir
022½A 2 Light Series with A214-14-inch Aluminum Reflector .	. 3.40	Fix ete cage
022½M 2 Light Series with M214-14-inch Mirror Reflector .	3.35	
022½T 2 Light Series with T214-14-inch Tin Reflector.	2.50	5 %
022½H 2 Light Series with H214-14-inch Enameled Steel Reflector	or 4.00	n a
023½A 3 Light Series with A214-14-inch Aluminum Reflector .	3.70	ssorted stors, b
023 M 3 Light Series with M214-14-inch Mirror Reflector .	3.65	
023 T 3 Light Series with T214-14-inch Tin Reflector		24 A refle tute
023½H 3 Light Series with H214-14-inch Enameled Steel Reflector		or r

For Divided Circuits see page 42 For Shade Holders see page 59 For Reflectors see page 62

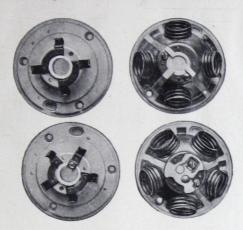
ADDITIONAL LENGTH STEM. Lengths up to 36-inch (%-inch brass tubing), 30c foot, list. Over 36 inches long (36-inch iron pipe and casing) 45c foot, list.

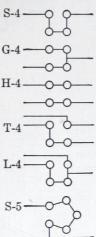
Series—Interior

Style 11/2 Cluster

Ceiling Form

Great care has been taken in designing these series clusters to separate as widely as possible all contacts having a difference of potential; porcelain partitions being provided where necessary, in order to make the insulation as great as possible. The short threaded socket shells (used in Benjamin Wireless Clusters) permit of a wide separation between the inner and outer contacts. The porcelain insulating base thoroughly insulates the live portions and the outer shell from the support used.





Made in Edison base only. Fibre lined. Polished Brass is standard finish and will be furnished unless otherwise specified.



Style 1½ Cluster

The above diagram shows the variety of ways in which these clusters can be furnished. The "S" connection is standard, all others are special.

Extra charge will be made for special onnections as follows:

G connection add to list				\$0.05
H connection add to list				.10
T connection add to list				.15
L connection add to list				.10

$13\frac{1}{2}$ $14\frac{1}{2}$	2 Light Series 3 Light Series 4 Light Series	(S-3) (S-4)					Cluster b only \$1.55 1.85 2.10	With No. 3100 Flange attached \$1. 70 2. 00 2. 25 2. 50	Std. Pkg. 12 12 12 12
15%	5 Light Series	(S-5)					2.35	2.50	24 hack

Any of the special metal reflectors of corresponding style numbers will fit on back of cluster base and require no holders.

Where it is desired to attach these clusters to a stem or to an outlet box one of the following flanges will be required. No. 3100 flange will be attached at factory if so ordered.

Style 11/2 Flange Backs with Screws Attached



Series-Interior

NATIONAL CODE STANDARD

Style 11/2 Cluster

Ceiling Forms

Cluster with Reflector.

For other supporting means see page 45.



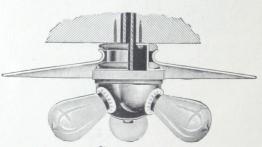
Metal Reflectors used with ceiling form (Style 1) fit Cluster back and are placed between same and ceiling.

Style 1½ R M114—14-inch Mirror Reflector shown

		THE STATE OF THE S		
Cat.			List Price, complete	Std. Pkg.
121A	2 Light Series with A114	14-inch Aluminum Reflector	\$2.95	12
13+A	3 Light Series with A114	14-inch Aluminum Reflector .	3.25	12
14½A	4 Light Series with A114	14-inch Aluminum Reflector	3.50	12
$15\frac{1}{2}A$	5 Light Series with A114	14-inch Aluminum Reflector	3.75	24
121M	2 Light Series with M114	14-inch Mirror Reflector	2.90	12
132M	3 Light Series with M114	14-inch Mirror Reflector	3.20	12
14±M		14-inch Mirror Reflector	3.45	12
15 M	5 Light Series with M114	14-inch Mirror Reflector	3.70	24
12½T	2 Light Series with T114	14-inch Tin Reflector	2.05	12
13½T	3 Light Series with T114	14-inch Tin Reflector	2.35	12
14 ¹ T	4 Light Series with T114	14-inch Tin Reflector	2.60	12
15½T	5 Light Series with T114	14-inch Tin Reflector	2.85	24
121H	2 Light Series with H114	14-inch Enameled Steel Reflector	. 3.55	12
131H	3 Light Series with H114	14-inch Enameled Steel Reflector.	3.85	12
14±H	4 Light Series with H114	14-inch Enameled Steel Reflector		12
15½H	5-Light Series with H114	14-inch Enameled Steel Reflector .	4.35	24

Cluster with Sub-base and Reflector.

For Divided Circuit see preceding page.



The rubber rings on the Sub-base form a bearing surface for the Reflector and prevent its contact with metal, thus forming a firm support for shade.

Style 150 R

	Car Cluster		
Cat. No.		List Price, complete	Std. Pkg.
100121	2 Lt. Series with No. 100 Sub-base, no Reflector		
100121	2 Lt. Series with No. 100 Sub-base, no Reflector	\$2.25	12
$10013\frac{1}{2}$	3 Lt. Series with No. 100 Sub-base, no Reflector	2.55	12
100142	4 Lt. Series with No. 100 Sub-base, no Reflector	2.80	12
$10015\frac{1}{2}$			24
10019D	2 It Series with No. 100 Sub-base, no Reflector	5.05	24
100121	2 Lt. Series with No. 100 Sub-base and P32514-14-in. Opal Refl.	ector 2.85	12
100101	o Lt. Series with No. 100 Sub-base and P32514_14-in Opal Roft	nator 2 15	12
100141	4 Lt. Series With No. 100 Suh-hase and P39514_14-in Onel Doff	anton 9 10	10
10015P	5 Lt. Series with No. 100 Sub-base and P32514—14-in. Opal Refl.	0.40	14
100107	2 L. C. 100 Sub-base and F32514—14-in. Opal Refi	ector 3.65	24
10012X	2 Lt. Series with No. 100 Sub-base and X32514-14-in. X-Ray Ref	ector 4 25	12
TOOTOW	DL. Deries Will INO. 100 Siln-hase and X 29514 14 in V Dorr Dor	Inches 1 FF	10
10014X	4 Lt. Series with No. 100 Sub-base and X32514—14-in. X-Ray Ref	1001 4.00	12
10015X	5 Lt Sories with No. 100 Sub-base and A52514—14-in. X-Ray Ref	lector 4.80	12
TOTOTA	5 Lt. Series with No. 100 Sub-base and X22514—14-in. X-Ray Ref.	ector 5.05	24
	For Reflectors see name 69 For Gold		

For Reflectors see page 62 For Sub-base see page 57

Series—Interior

Style 11/2 Cluster Pendant Forms

Fixture Stems (not exceeding 36 inch length) will be made of § inch brass tubing; longer lengths of \$-inch iron pipe and \$-inch brass casing. Low canopy and crowfoot are furnished unless otherwise specified.



Standard length stem, 8 inch. Standard finish, polished brass. Both standard finish and standard length stem will be furnished unless otherwise ordered.

For deep canopy and insulating joints add \$0.70 to the following list prices.

Style 01½ R

X32514-X-Ray Reflector shown

Cat. No.		List P		Std. Pkg.
$\begin{array}{c} 012\frac{1}{2} \\ 013\frac{1}{2} \\ 014\frac{1}{2} \\ 015\frac{1}{2} \end{array}$	2 Light Series without Reflector or Holder 3 Light Series without Reflector or Holder 4 Light Series without Reflector or Holder 5 Light Series without Reflector or Holder	2.	30 60 85 10	but complete
				nut
$\begin{array}{c} 012\frac{1}{2}P \\ 012\frac{1}{2}X \\ 012\frac{1}{2}E \end{array}$	2 Light Series with P32514 14-inch Porcelain Reflector 2 Light Series with X32514 14-inch X-Ray Reflector 2 Light Series with E32514 14-inch Diffusing Reflector.	4	20 60 00	lectors, b
$\begin{array}{c} 013\frac{1}{2}P \\ 013\frac{1}{2}X \\ 013\frac{1}{2}E \end{array}$	3 Light Series with P32514 14-inch Porcelain Reflector 3 Light Series with X32514 14-inch X-Ray Reflector 3 Light Series with E32514 14-inch Diffusing Reflector	. 4.	50 90 30	Shades or Reflectors, lete a standard package
$\begin{array}{c} 014\frac{1}{2}P \\ 014\frac{1}{2}X \\ 014\frac{1}{2}E \end{array}$	4 Light Series with P32514 14-inch Porcelain Reflector 4 Light Series with X32514 14-inch X-Ray Reflector 4 Light Series with E32514 14-inch Diffusing Reflector	. 5.	75 15 55	ut Shade itute a st
$\begin{array}{c} 015\frac{1}{2}P \\ 015\frac{1}{2}X \\ 015\frac{1}{2}E \end{array}$	5 Light Series with P32514 14-inch Porcelain Reflector 5 Light Series with X32514 14-inch X-Ray Reflector 5 Light Series with E32514 14-inch Diffusing Reflector	5.	00 40 80	or without ;
012½A 012½M 012½T	The special Reflectors in following group fit Cluster back and require no shade holders 2 Light Series with A114 14-inch Aluminum Reflector. 2 Light Series with M114 14-inch Mirror Reflector. 2 Light Series with T114 14-inch Tin Reflector.	3.	70 65 80	Assorted Cluster Fixtures, with or with stems and canopies,
013½A 013½M 013½T	3 Light Series with A114 14-inch Aluminum Reflector. 3 Light Series with M114 14-inch Mirror Reflector. 3 Light Series with T114 14-inch Tin Reflector.	3 3	00 95 10	ster Fixtu h stems a
$014\frac{1}{2}A$ $014\frac{1}{2}M$ $014\frac{1}{2}T$	4 Light Series with A114 14-inch Aluminum Reflector. 4 Light Series with M114 14-inch Mirror Reflector. 4 Light Series with T114 14-inch Tin Reflector.	3	25 20 35	orted Clu
015½A 015½M 015½T	5 Light Series with A114 14-inch Aluminum Reflector 5 Light Series with M114 14-inch Mirror Reflector 5 Light Series with T114 14-inch Tin Reflector	3	50 45 60	24 Ass
	For Shade Holders see page 59. For Reflectors see page 6	4.		

ADDITIONAL LENGTH STEM. Lengths up to 36 inch (%-inch brass tubing) 30c foot list. Over 36 inches long (%-inch iron pipe and casing) 45c foot list.

Sign Receptacles

NATIONAL CODE STANDARD

These Receptacles are designed for use with metal signs, junction or outlet boxes, border and foot-lights and for any work where it is desired to attach receptacles to sheet metal surfaces from the rear.

The receptacles are attached to metal surface by bolts furnished and included in

price.
Special covers for any given make of outlet base can be furnished punched to receive No. 6 or No. 6A Receptacles (prices furnished upon application).



No. 6S is essentially a Sign Receptacle, is furnished with three bolts which permits of the Receptacle being placed in any of *three* positions 120° apart, which greatly facilitates wiring.

Cat.							List Price	Std. Pkg,
6S	Sign	Receptacle,	with	bolts			\$0.20	250





No. 6 Receptacle is also largely used for signs but is especially adapted for outlet boxes or for rows of lights made up with sheet metal boxes having a removable cover such as border or footlights for theatres, etc.

theatres, etc.	}	
This cut shows No. 6 Receptacle mounted on a No. 3263 cover attached to a 3-inch Bossert outlet box.	No. 6	
Cat. Nc. 6 Sign Recentacle with bolts	List Price \$0.20	Std. Pkg. 250



No. 6A

No. 6A is same as No. 6 except that it has internal connections accessible from the front of Receptacle, which makes its use desirable where conditions will not permit of connections being exposed.

Cat.		List Price	Std. Pkg.
6A	Receptacle with bolts	\$0.25	100

Outlet Box Covers

-	5	F	
	0		

Cat. No.	Cat. No. 3263	List Price	Std. Pkg.
3163	Steel cover (enameled black) fits 3-inch Bossert box	\$.10	25
3164	Steel cover (enameled black) fits 4-inch Bossert box	.15	25
3263	Polished brass cover fits 3-inch Bossert box	.15	25
3264	Polished brass cover fits 4-inch Bossert box	.20	25

Cluster Wall Brackets

NATIONAL CODE STANDARD

The same general construction of our Ceiling Form Clusters is borne out in these Wall Brackets, insuring economy of installation together with that distinctly neat appearance always evident with Benjamin Wireless Clusters.

Made in one and two lights.

Edison base only.



Style 18 21/2-inch diameter

Finished Polished Brass.

Style 19 3-inch diameter

Cat.	1	List Std.
No.	, P	rice Pkg.
18 1 Light Multiple, Bracket only		0.65 12
19 2 Light Multiple, Bracket only		. 00 12

These brackets can be attached direct to outlet boxes on the wall by using No. 3223 flange. Designed to fit Bossert boxes.



Cat. No. 3223



Style 18 S G2255 Opal Shade shown

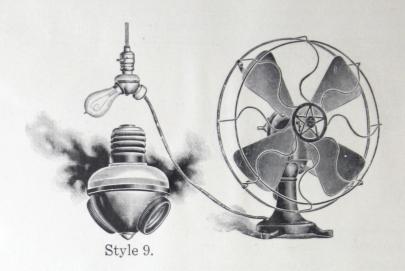


Style 19 S G2255 Opal Shade shown

Cat.	and the second s	Price, Std	
No.	comp	lete Pkg	
18G	Light Bracket with G2255 21/4 x 5-inch Opal Shade \$0	.95	2
18N	1 Light Bracket with N2256 21/4 x6-inch X-Ray Shade	.75 12	2
18V	1 Light Bracket with V1505 11/2 x5-inch Pagoda Shade	.50	2
18D	1 Light Bracket with D1506 11/2 x5-inch Diffusing Shade	.55 15	2
19G	2 Light Bracket with G2255 21/4 x5-inch Opal Shades	.60 15	2
19N	2 Light Bracket with N2256 21/4 x6-inch X-Ray Shades	. 20 15	2
19V	2 Light Bracket with V1505 11/2 x5-inch Pagoda Shades	70 15	2
19D		.80	2
3223	Flange for attaching to 3-inch outlet box	.10 24	4
3224	Flange for attaching to 4-inch outlet box	.15 2	4

For Shade Holders see page 59. For Shades see page 61.

Benjamin Wireless Receptacle Plug



Many thousands in daily use.

Fits any Edison base socket; receives any combination of lamps and attachment plugs. By its use a one light pendant can be converted into a cluster. You will need one of these when you connect your fan. Packed 12 in a box.

Cat No.								Lis	st Price, Each	Std. Pkg.
92	2 Light Multiple								\$1.00	48
$92\frac{1}{2}$	2 Light Series								1.10	24
93	3 Light Multiple								1.30	24
94	4 Light Multiple								1.60	24

If you want a convenient rheostat for charging storage batteries from a lamp socket, order a No. 93 B charging plug (not shown). This plug is same as No. 93 except that it is so connected that by connecting a lamp cord to binding screws in plug and running to terminals of battery, the lamps (in parallel) are connected in series with the battery. The rate of charge can be varied by inserting or removing lamps, the receptacle having three lamp openings.

Cat. N	0.	List Price, Each	Std. Pkg.
93B	3 Light Battery Charging Receptacle Plug	\$1.50	24

Show Window Lighting Appliances

Continued

Benjamin Plug Twin Socket

The use of the Plug Twin Socket with old style show window sockets or receptacles that are already installed, insures more and better distributed light without the neces-

sity of additional wiring.

The lamps being placed directly at right angles to the receptacle (which feature of itself wonderfully increases their effectiveness) and by adding the parabolic shades listed below or other similar shades, which allow free rotation on the plug, perfect light distribution may be obtained at any desired point.

Both plug and socket ends made in Edison base only.



Plugs finished in polished brass will be furnished unless otherwise ordered.

Plug Twin Socket-Cat. No. 942

Put up 25 in a box

Cat.		Pol. Brass each	Nickel Plated	
942	Plug Twin Socket only	\$1.00	\$1.05	25

Parabolic shade for above socket will fit any other standard socket.



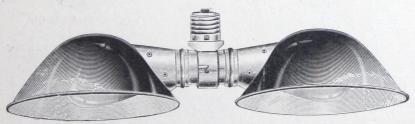
Frosted aluminum inside.
Green enameled outside.

Cat. No. 27

Cat.	List Price	Std.
No.	each	Pkg.
27 Standard 6-inch Parabola Shade	. \$0.60	144

The BENJAMIN PLUG TWIN SOCKET with HALF SHADES when used in conjunction with sockets or receptacles previously installed for window lighting will increase by several times the value of such sockets as a light agency.

The angle at which the lamps are placed in the plug being directly at right angles to the socket, secures the maximum deliverance of light from the lamps, and by rotating the shades on the plug, the light may be distributed to any point at will.



Cat. No. 94227

Cat.	Plug Twin Socket complete with Parabolic Shades	List Price Complete	Std. Pkg
94227	Plug Twin Socket and Shades	\$2.20	25

Show Window Lighting Appliances

Benjamin Twin Socket

These sockets were designed with a view of effecting an economy of installation over the ordinary socket or receptacle for Show Window and Show Case work, and at the same time increase the effectiveness of the light-distributing agency through a more complete use of shades and reflectors than was formerly possible.

The first feature is accomplished by so mounting the contacts that both ends of the sockets are connected by a *single pair of wires* and locking the shell without the use of set-screws. By this means two socket ends are connected, with an economy of both wire and labor, over the corresponding cost with an ordinary socket or receptacle.

Secondly, the sockets permit the use of parabolic or other shades of similar shape, which, being clamped on the socket only firmly enough to be rigid, can be rotated at will

to secure the proper light distribution.

On account of the excellent light distribution secured by the use of the Twin Socket, especially when used with individual shades, it is rapidly displacing sockets and other receptacles, for art galleries, libraries, etc., where the light must necessarily be evenly distributed over definite areas.

Made in Edison base only.



Sockets finished in Polished Brass will be furnished unless otherwise ordered.

Cat. No. 400-Twin Socket.

Cat.		List Price, each.	Std. Pkg.
400	Twin Socket only, polished brass	. \$0.65	50
401	Twin Socket only, nickel plated	70	50

Fittings for Twin Window Socket

*-inch Nipple *-inch long.



Polished Brass fittings will be furnished unless otherwise ordered.



\frac{1}{4}-inch flange

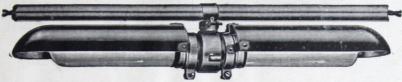
Cat. No. 180-Nipple

Cat. No. 194-Flange

Cat. No. 180	ea	Price, ich.	Std. Pkg. 50
181		.12	50
194	k-inch Flange, 1k-inch diameter, polished brass	.05	50
196	\frac{1}{2}-inch Flange, 1\frac{1}{2}-inch diameter, nickel plated	.07	50
4184	Socket, complete, with Nipple and Flange, polished brass	.80	50
4186	Socket, complete, with Nipple and Flange, nickel plated	.90	50

Show Case Lighting Appliances

The following cut shows No. 401 Twin Socket attached to a brass tube by means of Special Clamp No. 451, which also clamps firmly around the socket neck. No nipple is required, thus leaving an extra large opening through which wires can be looped and connections made without taps.



Cat. No. 42151. No tubes included

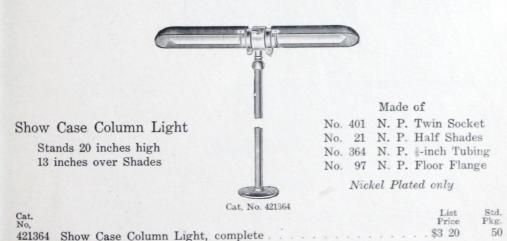
Wires can be looped into socket. Socket, Shades and Clamp nickel plated only in this complete grouping.

Cat,	Made of No. 401 Twin Socket, No. 21 Half Shades	List	Std.
	and No. 451 Clamp, all nickel plated.	Price	Pkg.
	Twin Socket and Shades with No. 451 Clamp.	. \$2 60	50



Socket and Half Shades with T-Clamp. Used with tubing when in sections. Wires are brought into socket direct from tube ends. Socket, Shades and T-Clamps nickel plated only in this completed grouping.

	Made of No. 401 Twin Socket, No. 21 Half Shades	Tiet	CLI
Cat.	and No. 461 T-Clamp, all nickel plated	List Price	Std. Pkg.
	Twin Socket and Shades with No. 461 T-Clamp	\$2.70	50



The following fittings are stamped from heavy brass and are absolutely rigid when clamped around the tubing.

The shell of No. 460 T-Clamp is separable and by means of three clamping rings, which rigidly hold the two sections of the clamp together, a most economical tube joint may be effected. The T-clamp also permits the building up of the tubing in lengths to suit conditions, which coupled with the fact that the wires are drawn from the tube end rather than through small holes drilled in the tubing, commend the T-Clamp No. 460 for careful consideration in show case work.

The No. 450 Clamp is made to receive \S -inch tubing and neck of \S -inch socket in its bottom opening.

No. 470 Elbow is likewise made to receive \(\frac{5}{2} \)-inch tubing and by means of the two clamping rings is made absolutely rigid. The shell of No. 470 Elbow is also separable and like No. 460 clamp is a great aid in the sectional building up of tubing.

Cat. No. 450 451 460 461 470 471	T-Clamp for \(\frac{1}{2}\)-inch brass T-Clamp for \(\frac{1}{2}\)-inch bra T-Clamp for \(\frac{1}{2}\)-inch brass Elbow for \(\frac{1}{2}\)-inch brass	T-Clamp tubing, polished brass tubing, nickel plated uss tubing, polished brass uss tubing, nickel plated tubing, polished brass tubing, polished brass tubing, nickel plated	Elbow List Price Each \$0.25 0.30 0.35 0.40 0.30 0.35	Std. Pkg. 25 25 25 25 25
	Half shade 6½-inch long.	Half Shade	Nickel plated only.	
Cat. No. 21	Half shade 6½-inch long	;, nickel plated only .		Std. Pkg. 144
	Tubing not threaded			

§-inch Brass Tubing

Cat.	5 inch Coomless taking 11 1 1									n	ist Price er Foot
354	§-inch Seamless tubing, polished brass										\$0.30
001	\$-inch Seamless tubing, nickel plated .										0.35

For drilling wire openings add 5c each list. For threading tubing add 5c list for each threaded end.

Lamp and Cluster Guards

Lamp Guard

This Lamp Guard is made in two halves, each half being pressed up from one piece of sheet steel with a spring added, to center and to protect the lamp from striking the guard. The two parts are hinged together and grip the socket, thus relieving the lamp from undue strain. The sheet metal forming guard is formed edgewise radially with lamp, thus presenting a thin edge to cast a shadow. The lamp and guard are easily removed. Made in one size (8 to 16 C. P.) only.



Put up 12 in a box.

Cat.							List Price	Std. Pkg.
160	Steel Lamp	Guard	(8 to	16	C.	P.) tinned.	. \$0.18	144



Portable Lamp Socket

Consists of socket, handle and guard. The handle is jet enamel finish and is solidly attached to cap of socket.

Put up 6 in a box

Cat.		List Price	Std. Pkg.
165	Portable, complete, with Key Socket .	\$0.70	12
	Portable, complete, with Keyless Socket	66	12
167	Portable, complete, with Key Socket, 2 yds. Cord and Attch. Plug	1.20	12
168	Portable, complete, with Keyless Socket, 2 yds. Cord and Attch. Plug	1 16	12

Extra Length Lamp Cord, per yd. 12c

Wire Cluster Guard

This Guard is strong and durable. It is attached to the ceiling by means of four wood screws.

Made for Benjamin Wireless Cluster only.



This cage is made of tinned wire and will take a Cluster with 14-inch Shade.

Cat	No.	170

Cat.	15 inches in diamet	ter List	Std. Pkg
	Cluster Guard, 15-inch		12

Extensions, Adjusters, Etc.

Ben-Extension

One in a box ready for use made up and tested in factory



No threaded bushings in cap of socket or plug

Cat. No. 4302	2 yards keyless																	List Price \$0.80
4303	3 yards keyless																	.90
	2 yards key																	
4313	•3 yards key																	.90
Extr	a length cord, per	ry	/a	rd														.12

Ben's Drop Light Adjuster

A simple and effective means of adjustably supporting a lamp in a horizontal position at any height, and of concentrating the light where it is wanted. The parabolic frosted aluminum shade can be rotated so as to throw the light in any desired direction.



Made from spring brass wire so formed as to spring over the socket and grip the cord. Can be used with any standard socket.

Patent applied for

435	Adjuster only)
21	Frosted Aluminum Shade only	1
4012A	Adjuster, Shade, 2-yard extension, with Key Socket and Attachment Plug 1 50	1
4313A	Adjuster, Shade, 3-yard extension, with Key Socket and Attachment Plug 1.60)

Socket Rings



Made for Benjamin Wireless Cluster and Plug Receptacles only



TAT	0.	я.	n	1/
TA	O.	1	v	72

	140, 10	No.	10½
Cat. No. 10 10½	Porcelain Socket Ring . Imitation Hard Rubber Socket Rings	List Price . \$0.05	Std. Pkg. 100

Sub-Bases—Interior

Styles 1 and 2 Metal Sub-Bases are intended to be used with clusters of corresponding style numbers and are adapted to hold firmly opal reflectors between the rubber rings. These Bases attach direct to ceiling or wooden block.



Style 1 takes Clusters 1, $1\frac{1}{2}$, 7 and K. Style 2 takes Clusters 2 and $2\frac{1}{2}$.



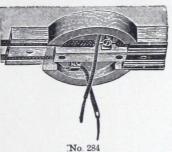
Sub-Bases with Rubber Rings and Screws attached

Cat. No.	List Price	Std. Pkg.
1 Metal Sub-Base, complete	\$0.70	24
2 Metal Sub-Base, complete	.70	24

Porcelain Sub-Base

Takes Styles 2 and 2 Clusters only Used for Moulding or Open Work

For multiple work this Sub-Base is furnished with wires attached. For Series work no wires are required.



The supporting screws pass through both Cluster and Sub-Base into ceiling.

Porcelain Sub-Base, 3 inches diameter

Cat.		List Price	Std. Pkg
284	Porcelain Sub-Base, complete, with leads	\$0.30	24
2841	Porcelain Sub-Base, complete, without leads or binding plates	. 10	24

Oak Ceiling Block

These Ceiling Blocks are made from oak and are varnished.

The back of Block is counterbored to cover bushings or conduit projection.



No. 287

This Block is suitable for attaching clusters or fixtures of any description to plastered or metal ceiling and is thick enough to be cut out to span mouldings.

	12 menes x 41 menes		
Cat.		List Price	Std. Pkg.
	Oak Ceiling Block	\$0.30	24

Canopies and Fittings

Polished Brass



Low Canopy

Polished Brass Canopy, $4\frac{1}{2}$ inches in diameter by $2\frac{1}{2}$ inches deep (furnished for most fixtures where insulating joint is not specified).

Cat.	140, 51	10										List Price	Std. Pkg
3170	Polished	Brass	Canopy,	4½x2½	inches,	5-inch	slip			. ,		\$0.25	24
3175	Polished	Brass	Canopy,	$4\frac{1}{2}x2\frac{1}{2}$	inches,	a-inch	slip.			. ,		.25	24

Deep Canopy

Polished Brass Canopy $4\frac{1}{2}$ inches in diameter by 4 inches deep (furnished where insulating joints are specified and for all Arc-Burst Clusters).



		No. 3320	
	Polished Brass Canopy, 4½x4 inches, 4-inch slip		Std. Pkg. 24
3325	Polished Brass Canopy, 42x4 inches, 4-inch slip	40	24
0))))	Deliched Down Birton 6		

Polished Brass Fixture Stems No. 351 Cat. No. 351 Stimular Price Polished Brass Tubing, 8 inches long, threaded \$0.30 Additional length, per foot .30 Additional length, per foot .45 Additional length, per foot .45 355 ½-inch Iron Pipe and 1-inch Polished Brass Casing, 8 inches long Additional length, per foot .45 Additional length, per foot .60

0.1	Nipples			mattim
Cat.		List Plice	Std, Pkg.	Annialitation
180	18x3-inch Polished Brass Nipples	\$0 10	50	No. 180
101	x4-inch Nickel Plated Nipples	12	50	

Cat, No,

Wall Plates

	No,	List Price	Std. Pkg.
No. 194	194 196	\frac{1}{8}\text{x1\frac{1}{4}}\text{-inch Wall Plate, female, Polished Brass \\ \frac{1}{8}\text{x1\frac{1}{4}}\text{-inch Wall Plate, female, Nickle Plated \\ \text{.07}	50 50

Shade Holders

Polished Brass Finish

This is a special 2½-inch Shade Holder made for Benjamin Wireless Clusters only and is held in position by the insulating socket ring.

Cat.		List Price	Std. Pkg.
245	2‡-inch Shade Holder	. \$0.10	144



This is a special 15-inch Holder made for Benjamin Wireless Clusters only and is attached same as No. 245.

Cat.		List Price	Std. Pkg.
777	18-inch Shade Holder	\$0.10	144



No. 246

This Holder is adapted to support a shade with a 24-inch neck and made in both §-inch and 4-inch slip.

Cat.						List	Std. Pkg.
2470	21-inch Holder, &-inch Slip				. \$0		
2475	21-inch Holder, 2-inch Slip					. 20	144



No. 2470

This 3\(\frac{1}{2}\)-inch Holder is made to support shade from stem.

Cat.	List Pric	Std. e Pkg.
	3½-inch Holder, ½-inch Slip \$0.30	



No. 2490

Fixture Fittings

Iron



Cat.		1	Mallea	ble	Iron	(Cr	0	w	fe	et	,		List Price	Std. Pkg.
1950 1955	Tapped Tapped	for for	⁸ -inch ½-inch	iron iron	pipe pipe									\$0.05	144 144

	Insulating Joints		
1223 1226	$\frac{8}{8}$ $x \frac{9}{8}$ -inch Malleable Iron $\frac{1}{3}$ $x \frac{8}{8}$ -inch Malleable Iron	.60	144 144



No. 1450

List Std. Price Pkg. 15 144 20 144

Gooseneck

Mal. Iron Hickey

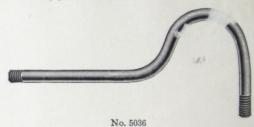
1450 §x§-inch Hickey

1455 xs-inch Hickey.

Formed from 3 feet of 1/2-inch iron pipe enameled black



No. 5024



036	30-inch	Gooseneck							.60	24



Wall Fitting

o.		Used with No, 5036 Gooseneck when attaching to flat surfaces. Enameled black	List Price	Std. Pkg.
024	Wall	Fitting tapped for ½-inch pipe	. \$0.30	24

Pole Fitting

Used with No. 5036 Gooseneck for attaching to poles or curved surfaces

5025 Pole Fitting tapped for ½-inch iron pipe . . .

No. 5025

½x8-inch Nipple

Cat. No.	Made from loricated conduit, used for Outdoor Clusters (suspension form)	List Price			
6008	1x8-inch Nipple	\$0.25	24	No. 6008	

Weatherproof Suspension Fitting

Enameled black, used for outdoor Clusters (suspension form) 6028 Suspension Fitting tapped for ½-inch pipe. . . 24 No. 6028



Shades and Reflectors

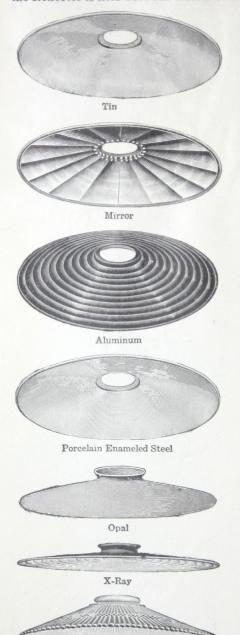
These Shades are especially adapted for use with Benjamin Wireless Clusters.

Opal Shad Fits No. 245 Ho No. G2255 2½x5-inch Opal Shade	le older List Price \$0.2	e Pkg.	Cat No cooks over
X-Ray Sha One-piece Mi Fits No. 245 Ho No. N2256 21x6-inch X-Ray Shade	rror	e Pkg. 60	Cat. No. G2255-Opal
Pagoda Prismat Fits No. 246 H Cat. No. V1505 14x5-inch Pago ^{A- Sh} ade		ice Pkg.	Cat. No. V1505—Pagoda
White Diffusing Pris Fits No. 246 H Cat. No. D1506 1. 5-inch Diffusing Shade . Parabolic Frosted Aluminum F	Lis Pric \$0.5	e Pkg.	Cat. No. D1506 Diffusing
This Shade is well adapted for use 4 Twin Socket and the No. 942 Twin (see pages 51 to 53) but may be used son Socket. Cat. No.	with the No. Socket Plug sed with any List Std. Price Pkg.		
27 Par. Frosted Alum. Half Shade. This is a nickel plated half shad adapted for use with the No. 4 Twin So 942 Twin Socket Plug for show case lighting. Cat. No. Li Pr. 21 Nickel Plated half shade \$.	le especially cket and No. and window st Std, rice Pkg.	o	77—Aluminum
Reflectors for Out-Door Us These reflectors are made from steel with a thick coat of fire emamel. The center is fitted with a nut tap iron pipe. The reflector is white on bot Cat.	heavy	Porcelain Enan	
H10 10-inch steel shade tapped ½-inch H15 15-inch steel shade tapped ½-inch H18 18-inch steel shade tapped ½-inch H20 20-inch steel shade tapped ½-inch H54 24-inch steel shade tapped ¾-inch			List Price Std. Price Pkg. \$1 00 24 2 00 24 2 50 24 3 00 24 4 00 24

Reflectors

For Interior Lighting

The following group are special Metalic Reflectors made to fit the back of Cluster Body and require no shade holder. When used with Ceiling Cluster the Reflector is placed between the ceiling and the cluster back and when used with Cluster Fixtures the Reflector is held between cluster back and flange.



Prismatic Diffusing

Tin	Reflectors

Cat.	White inside and green outside List Price	Std. Pkg.
T114	14-in., fits styles 1, 7 and K \$0.50	24
	16-in., fits styles 1, 7 and K .60	24
T214	14-in., fits style 2 Cluster50	24
	16-in., fits style 2 Cluster 60	24
T812	12-in., fits style 8 Cluster40	24

Mirror Reflectors

	Sectional glass, green outside		
M114	14-in., fits styles 1, 7 and K	1.35	24
M116	16-in., fits styles 1, 7 and K	1.65	24
	14-in., fits style 2 Cluster		24
M216	16-in., fits style 2 Cluster	1.65	24
M812	12-in., fits style 8 Cluster	1.10	24

Aluminum Reflectors

	Polished inside, green outside		
A114	14-in., fits styles 1, 7 and K	1.40	24
A116	16-in., fits styles 1, 7 and K	1.70	24
A214	14-in., fits style 2 Cluster	1.40	24
A216	16-in., fits style 2 Cluster	1.70	24
A812	12-in., fits style 8 Cluster	1.20	24

Porcelain Enameled Steel Reflectors

	10011000015									
Most durable Reflectors made; white inside and outside										
H114	14-in., fits styles 1, 7 and K 2 00	2								
H214	14-in., fits style 2 Cluster 2 00	2								

The following group require Shade Holders

Onal Padactors

	Ope	al Itellectors		
P32512	$12x2\frac{1}{4}$ -in.	Opal Reflector	.50	48
P32514	14x3\(\frac{1}{2}\)-in.	Opal Reflector	.60	48
P32516	16x3\frac{1}{4}-in.	Opal Reflector	.90	36
P32518	18x3\(\frac{1}{4}\)-in.	Opal Reflector	1.30	36
		•		

X-Ray Reflectors

	A Mirror	Reflector	in one piece		
X32514	14x3\(\frac{1}{4}\)-in.	X-Ray	Reflector	2.00	15
X32516	16x3\(\frac{1}{4}\)-in.	X-Ray	Reflector	2.30	15
X32518	18x3\frac{1}{4}-in.	X-Ray	Reflector	2.60	15

Prismatic Diffusing Reflector

A white Prismatic Reflector E32514 14x3\frac{1}{2}-in. Diffusing Refl. 2.40 24

Special Finishes

Polished Brass is standard finish for all interior clusters and fixtures where not otherwise designated in catalogue. Polished Aluminum shells are standard for all weatherproof clusters and sockets.

Frosted Aluminum cluster shells are standard for all Arc-Burst clusters.

Extra charge is made for all finishes not standard unless otherwise provided for in catalogue as follows:

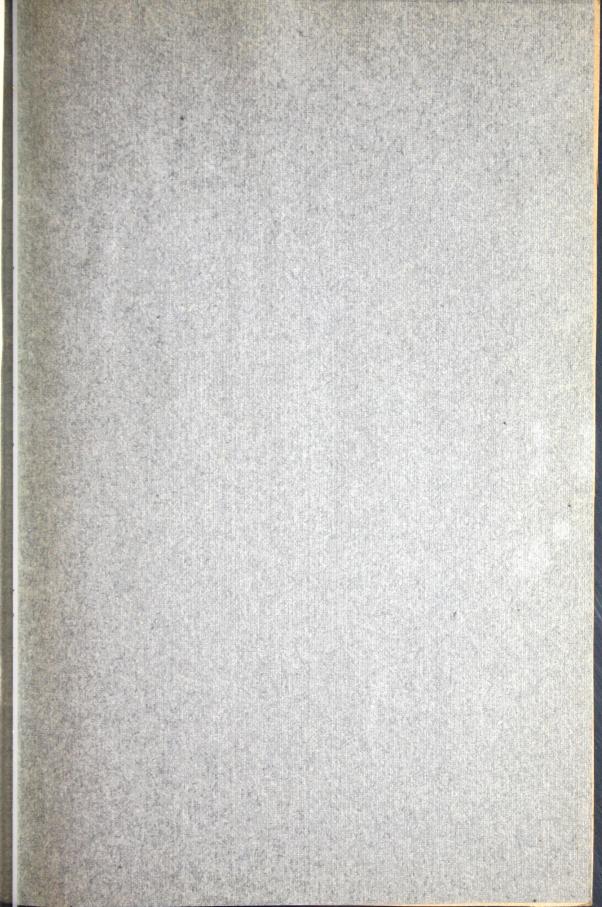
Add to List Prices

	Cluster bodies Stems, canopies, only shade holders, etc.
Old brass	5% 10%
Rich gilt	5% 10%
Wrought iron	5%
Black marine	5%
Bariff Bariff	10% 20%
Oxidized copper	10% 20%
Mottled copper	10%

Prices on other finishes quoted on application.

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TO THE TRADE

GENTLEMEN:

We wish to express our appreciation of your moral support and patronage during the recent patent litigation between ourselves and the Dale Company.

We are pleased to advise you of the fact that a decision has recently been rendered, which, although not as sweeping as we expected, is in the main in our favor.

Judge Holt held that our patents in suit were, in his opinion, valid, as per the following, taken from the decision:

"The Clusters manufactured under the Benjamin patents immediately entered into extensive commercial use. I think there is sufficient mechanical invention shown in the Benjamin patents to make the patents valid."

That the Court was not certain of his ground in the matter of infringement is clearly indicated by the following extract taken from his opinion:

"Upon the question whether the Clusters manufactured by the defendants under the patent issued to Dale infringed the complainants' patents, I have felt much doubt. The Dale patent certainly does not differ greatly from the Benjamin patents, and particularly patent No. 721,777, commonly spoken of as the second patent in suit.

"Upon the whole, I think that the defense of the invalidity of the complainants' patent is not sustained, but that the defense of non-infringement is sustained."

We feel greatly encouraged to appeal the case to the higher Court, and confidently look for a decision more completely in our favor.

We solicit a continuation of the good will you have shown in the past, and trust that the superiority of our goods will warrant your placing future orders with us.

BENJAMIN ELECTRIC MFG. CO.



